EXPLORING PERSON-CENTREDNESS IN THE EMERGENCY DEPARTMENT – A MIXED METHODS STUDY

Volume 1 of 1

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I confirm that the word count of this thesis is less than 100,000

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ABSTRACT

Background: Media attention has highlighted poor quality care experiences in emergency departments. Overcrowding, prolonged delays in treatment of pain and suffering, lengthy waiting times, and patient and staff dissatisfaction have all been reported. Person-centred approaches have been shown to transform the care experience in a range of healthcare settings, however this concept is largely unexplored within the emergency department context.

Aim and objectives: This study was designed to explore person-centredness in emergency departments. Three objectives were established: (i) exploring the relationship between attributes of nurses and doctors, their engagement in care processes and the care environment from a staff perspective, (ii) investigating how the relationships identified from objective one were experienced by staff and service users and (iii) psychometric testing of the measurement tool.

Methodology: A two-stage sequential mixed methods study was adopted. For the stage 1 survey, the Person-centred Practice Inventory-Staff was distributed to qualified nurses and doctors in all emergency departments in one region in the United Kingdom. In qualitative stage two, semi-structured interviews were conducted with 44 emergency department staff and service users. The datasets from both stages were integrated at the interpretive stage.

***Result*s:** Statistical analysis of the 308 completed questionnaires revealed that staff felt they were person-centred and delivered person-centred care. Thematic analysis of the qualitative data, using Braun and Clarke's framework, revealed an environment

in which person-centredness was not being realised, and identified poor care experiences for staff and service users.

Integration of the datasets showed that while emergency department staff supported a philosophy of person-centeredness, service users do not experience person-centred care. There was an interplay between the macro-context and the care environment, which had a powerful compromising influence on care delivery. In addition, staffs' own value and belief systems, which valued the priority of medical-technical care, were a barrier to person-centred practice.

ABBREVIATIONS

A&E:	Accident and Emergency
CFA:	Confirmatory Factor Analysis
CFI:	Comparative Fit Index
DHSSPS:	Department of Health, Social Services and Public Safety
ED:	Emergency Department
GP:	General Practitioner
NI:	Northern Ireland
PCPI-S:	Person-centred Practice Inventory-Staff
PCPF:	Person-centred Practice Framework
RMSEA:	Root Mean Square Error of Approximation
RPA:	Review of Public Administration
UK:	United Kingdom
X^2:	Chi square
Yrs:	Years

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CHAPTER 1: INTRODUCTORY CHAPTER

Person-centred approaches to care delivery have been increasingly promoted in international policy and strategy over the last decade as a means of enhancing standards of care (Laird et al. 2015). Its translation into care delivery has been proven to have a positive impact on patients and staff (McCormack and McCance 2010). Despite the apparent drive towards a person-centred approach, recent Public Inquiries in the United Kingdom (UK) have revealed substantial failings within the healthcare system that have had significant impact on the quality of patient care (Berwick 2013; Francis 2013). Reports from these Inquires highlighted inadequate communication, acceptance of poor standards and a culture that focused on systems rather than patients. Despite lessons that should have been learned from these Inquiries, care remains inadequate, and reports from emergency departments (EDs) continue to highlight overcrowding, medical errors, prolonged delays in the treatment of pain and suffering, lengthy waiting times, and patient and staff dissatisfaction (Canadian Association of Emergency Physicians 2015).

Within the UK the ED experience continues to dominate the media with headlines portraying an environment that is the antithesis of person-centred care, for example, *"A&E units have become like warzones"* (The Telegraph 2013), *"Cancer patients 26 hours of hell on earth in A&E"* (Belfast Telegraph 2014) and *"Porter 'fed up of seeing nurses crying' over A&E problems"* (BBC News Online 2014). A Royal College of Nursing spokesperson reported that the current ED system in Northern Ireland (NI) was de-humanising and patients were not getting the quality of care they deserved, or that nurses wanted to provide (Royal College of Nursing 2012). This was the prevailing situation that prompted the researcher to undertake this study. This opening chapter sets the study in context and introduces the reader to the concepts of person-

centredness and emergency care. It gives a brief account of the value of a person-centred approach and the definition of person-centredness used in the context of this study. A definition and the intended function of an ED in NI are presented, and the rationale for the study is given. It concludes with an outline of the thesis giving a brief overview of the content of each of the subsequent chapters.

1.1 Care in Emergency Departments

Several factors have contributed to the increased demand on ED services. Firstly, the international trend towards the downsizing of hospital capacity and closure of ED services (Rocovich and Patel 2012; Melon et al. 2013) has also been experienced within NI. In 2002 proposals to modernise acute health care services (Department of Health, Social Services and Public Safety 2002) and a subsequent Review of Public Administration (RPA) (RPA 2005) led to a restructuring of health care services in NI. The result of this was a reduction in the number of acute hospitals and the replacement of some EDs with minor injury units. Other factors that have been cited include a growth in attendances, population ageing, an increase in patients presenting with multiple co-morbidities and chronic diseases, the widening cultural diversity of patients, increased acuity on presentation and enhanced levels of intervention (Duffield et al. 2010), the misuse of ED by those who do not require emergency care, and a high level of alcohol misuse and abuse (Black 2014). According to Kennedy (2017) issues such as unsafe staffing levels, the winter bed crisis and delayed discharges are now daily challenges faced within EDs.

Within NI an Emergency Department Improvement Action Group was created following concerns about care in EDs (Black 2014). Poor performances in two EDs prompted independent reviews to be carried out within two separate trusts (The Regulation and Quality Improvement Authority 2014a; The Regulation and Quality

Improvement Authority 2015). Staff were found to be experiencing significant challenges including staff shortages and compromised patient safety that impacted considerably on the patient experience (The Regulation and Quality Improvement Authority 2014a). Findings from these reports have led to the provision of additional staffing and financial resources in an attempt to address those issues identified (Black 2014; The Regulation and Quality Improvement Authority 2014b).

Past government policy focused on quality initiatives to improve patient experience in EDs by reducing waiting times, with time targets being set in order to expedite the patient's journey through ED (Department of Health 2001). Little attention was paid, however, to other quality issues such as overcrowding, lack of resources, staffing and bed availability (Vezyridis and Timmons 2014). Research suggests that while care within ED has become timelier, this has largely been at the expense of quality in other areas such as communication and clinical care (Mortimore and Cooper 2007; Hoyle and Grant 2015). However, time targets continue to be a key performance standard for Acute NHS Hospital Trusts (Weber et al. 2011). This is largely due to widespread public and professional opposition to abolishing them, as while there is recognition that issues other than waiting times need to be improved, there is also a fear of reversing perceived gains already achieved through their introduction (Weber et al. 2011).

1.2 The value of a person-centred approach

Improving the patient experience is concerned with more than just good clinical care. It includes being cared for with kindness, compassion and respect (Goodrich and Cornwell 2008). According to McCance and Gribben (2012) this emphasises the need to focus on attitudes, behaviours and relationships that reflect the importance of working in ways that support a person-centred approach and puts the patient at the

centre of care delivery. In health-care the concept of person-centredness has gained recognition at global level (McCance et al. 2011). The development of person-centred care has been demonstrated to transform practices for patients and improve care delivery in a range of acute and critical care settings (McCormack and McCance 2017). In NI the nursing strategy document sets the vision for nursing for the next five years and highlights the significance of the development of person-centred cultures in improving the patient experience (Department of Health, Social Services and Public Safety 2015), however its introduction into Emergency Departments has not yet been realised.

The concept of person-centredness is discussed in chapter 2 however in order to set the scene, the definition used in the context of this study is presented here. It draws on the work of McCormack and McCance (2010, 2017) where person-centredness is defined as

> *"An approach to practice established through the formation and fostering of therapeutic relationships between all care providers, service users and others significant to them in their lives. It is underpinned by values of respect for persons, individual right to self-determination, mutual respect and understanding. It is enabled by cultures of empowerment that foster continuous approaches to practice development". (McCormack and McCance 2017, p.3)*

McCormack and McCance (2010, 2017) developed the Person-Centred Practice Framework (PCPF) as a tool to promote greater understanding of person-centred practice and serve as a framework for staff to operationalise person-centredness in their practice. It was developed from empirical research on person-centred practice with older people (McCormack 2003) and the experience of caring in nursing (McCance 2003). It has been used by staff as a focus for problem solving, learning and discovery through their own experiences (McCance and Gribben 2012) and to evaluate developments in practice and hence demonstrate outcomes for staff and

patients (McCormack and McCance 2010). The PCPF is the theoretical framework which underpins this research study and is discussed in greater detail in chapter 4.

1.3 What is an Emergency Department?

The term 'Emergency Department' needed to be defined and its intended function established for the purposes of this research. For many an Emergency Department (ED) is the first point of entry to the healthcare service (Augustine 2015). Breen and McCann (2013, p180) trace the various names for EDs back to the early use of the name '*Casualty'* which was later changed to *'Accident and Emergency'* in an attempt to discourage the attendance of patients who were not suffering as a result of either accidents or emergencies. According to Breen and McCann (2013), however, despite the further change of name to *'Emergency Department'* many patients persist in using the service for not only emergencies, but also for primary healthcare needs. Mosby's Medical Dictionary (2013) defines an ED as a department within a healthcare institution equipped to provide rapid and varied emergency care to patients who become affected by sudden illness or severe trauma, and which may use a triage classification system to identify and treat patients in accordance with their priority needs. The Department of Health, Social Services and Public Safety (DHSSPS) (2007) states that EDs are a consultant led 24-hour service with full resuscitation facilities that accept referrals from a range of sources including ambulance service, general practitioners and self-referrers. The DHSSPS (2007) expand on this to acknowledge the breadth of conditions treated in EDs, which they state range from minor (cuts, abrasions) to serious injuries (multi-trauma) and illnesses (coughs and colds, cardiac arrest). In NI, following the restructuring of health care services (RPA 2005), three different classifications of EDs were identified of Type 1, Type 2 and Type 3 units. Table 1.1 shows these definitions (Black 2014).

Table 1.1: Definitions of the three classifications of EDs in Northern Ireland

Type 1	A major unit with consultant-led services and accommodation for patients; emergency medicine and surgical services are provided on a 24-hour basis.
Type 2	A consultant-led service with accommodation for patients; either emergency medicine or emergency surgical services may be provided. These services have restricted opening hours.
Type 3	Minor injuries units cater for patients with a minor injury or illness. These units may be doctor or nurse-led. They also have restricted opening hours. Some units will only treat patients over 5 years of age.

1.4 Rationale for the study

As noted above media attention and recent reports have highlighted the poor quality of the ED care experience for many staff and service users. This identified the need for research to be undertaken in order to establish the factors causing or contributing to this care experience, so that they could be addressed effectively. Person-centredness has been promoted within health care policy internationally as a means of improving standards of care (Laird et al. 2015). However, the notion of person-centredness as a concept within the ED setting was not apparent (McConnell et al 2015). Person-centred care is comprised of several distinct components that interact with each other and ultimately determine the care experience for staff and service users. There is little available evidence in the literature on how person-centredness is currently experienced within ED. Therefore, the care experience for staff and service users needed to be explored with reference to the components of person-centredness and the relationships between them, in order to establish how these were experienced within ED and identify where interventions could be effective for the future.

1.4.1 Aim and objectives of the study

The aim of this study was to explore person-centred practice within the ED environment. To achieve this the following objectives were identified:

1. To explore the relationship between attributes of nurses and doctors, their engagement in care processes and the care environment from a staff perspective.
2. To investigate how the relationships identified from objective 1 are experienced by staff and service users.
3. To psychometrically test the Person-centred Practice Inventory (staff) (PCPI-S) in relation to the ED population.

1.5 Structure of the thesis

This section gives an overview of the structure of the thesis and includes a brief summary of each chapter. C*hapter 1* has introduced the thesis and gives a background of the ED context. It provides justification for the study together with aims and objectives along with this overview.

Chapter 2 provides a review of the literature in relation to person-centredness in general and person-centredness in emergency departments. The first section explores the concept of person-centredness and how it has been developed in practice. The second section presents published literature relating specifically to emergency departments. It details the search strategy used, and the resulting number of articles retrieved and critiqued. Finally, following an analysis of the literature, the links to person-centredness are made and gaps in the knowledge base identified. A paper pertaining to this literature '*Exploring person-centredness in emergency departments: A literature review'* (McConnell et al. 2015) has been published in the peer reviewed journal International Emergency Nursing (see Appendix 1). *Chapter 2*

presents the updated version of this literature review which considers the most recently published literature found prior to submission of the thesis.

Chapter 3 presents the philosophical underpinnings of this study. It discusses the main underpinning principles of pragmatism and how the pragmatic approach is the paradigm of choice for this mixed methods study. This chapter closes with a reflexive account of my own personal stance in order to make explicit my values, attitudes, and any potential biases that could influence the research process undertaken within this study.

Chapter 4 details the mixed methods research design and methodology adopted within the study. Rationale and justification are given for the use of the two stage sequential approach used. The processes for the two distinct quantitative and qualitative stages are discussed including the data analysis procedures and integration of the two stages. The techniques that were used to address rigour within the study are discussed to ensure credibility of the findings. Finally, the ethical considerations that were identified and pertinent to this study, and the strategies to address these are described.

Chapter 5 presents the confirmatory factor analysis (CFA) which was conducted on the stage 1 quantitative findings. This was carried out to establish the psychometric properties of the Person-centred Practice Inventory (PCPI-S) measurement tool to ensure the integrity of the study findings. This chapter describes each of the tests undertaken and presents the findings to determine if the model was an acceptable 'fit'.

Chapter 6 presents the path analysis findings which assess the relationships between the *Prerequisites*, *Care Environment* and *Care Processes* constructs of the PCPF, as

measured by the PCPI-S using the ED data. As in the previous chapter, a number of tests were undertaken and fit statistics assessed to determine the model's 'fit'.

Chapter 7 presents the descriptive statistics from the stage 1 data. Following an assessment of the normality of the data it presents a demographic profile of the participants of stage 1 of the study. The descriptive and inferential results are presented for each of the *Prerequisites*, *Care Environment* and *Care Processes* domains in relation to the ED size, profession, total length of experience in clinical practice and length of ED experience.

Chapter 8 presents the analysis of the qualitative interviews from stage 2 of the study. The interview transcripts were thematically analysed and are presented in this chapter under four core themes, each with a number of sub-themes. Extracts from the transcripts are used to support the development of these themes and demonstrate a clear audit trail throughout this chapter.

Chapter 9 presents the integration of the stage 1 and stage 2 findings. The aim and objectives of the study are re-stated in this chapter to guide the reader in assessing how these have been achieved by the integration of the data. The findings from stage 1 are revisited in light of the stage 2 data. The complementary and/or dissonant aspects of each of the constructs and domains from both datasets are brought together to give a more complete picture and increase understanding of person-centredness in EDs as a whole.

Chapter 10 is the final chapter of the thesis and details the contributions to knowledge that this study makes. Recommendations are given for policy, practice and education. The strengths and limitations of the study's findings are identified. Finally, a personal reflection of the research process is presented.

CHAPTER 2: A REVIEW OF THE LITERATURE

The aim of this chapter is to present a review of the existing literature relating to person-centredness within Emergency Departments. The first section provides an overview of the general literature on person-centredness and establishes what is meant by person-centeredness in the context of this study. The second section is an extensive review of the existing literature on person-centredness in emergency departments. An article '*Exploring person-centredness in emergency departments: A literature review'* (McConnell et al. 2015)[1], based on this chapter, was written and published in 2015 in the peer reviewed journal *International Emergency Nursing* (see Appendix 1). This review presents an expanded and updated version of this article and considers the most recently published literature.

2.1 Search strategy

The literature review search strategy was undertaken in two stages. The first stage was designed to retrieve general literature on person-centredness. The databases Proquest, Cumulative Index to Nursing and Allied Health (CINAHL) and Medline Ovid were searched using keywords shown in Table 2.1. The search was limited to articles published in English, relating to humans and adult age group. The literature was reviewed by title, abstract, and then full-text for inclusion. From these, 27 papers on person-centredness in general were found. This search was designed to obtain information on the inception, development, and conceptual underpinnings of person-centredness; therefore historical, non-empirical literature was also relevant to the review. Reference lists and internet sources such as Google Scholar were searched,

[1] McConnell, D., McCance, T. and Melby, V. (2015) Exploring person-centredness in emergency departments: a literature review. International Emergency Nursing, 26, 38-46.

and a total of 32 relevant publications were used for the first section of this literature review.

Table 2.1: Keywords used for section 1 of the literature review

Keywords	Person centred Patient centred Client centred Relationship centred

The second stage was designed to retrieve literature on person-centredness in EDs. Due to the exploratory nature of this study a scoping review was undertaken as this is a suitable approach when evaluating the extent to which research on a topic has or has not been completed (Wilson et al. 2012).The databases Proquest, Cumulative Index to Nursing and Allied Health (CINAHL) and Medline Ovid were searched using keywords shown in Table 2.2a. The inclusion period for the initial search was January 2002 to July 2014. This revealed a dearth of relevant literature highlighting the lack of research in this area and therefore the need for a change in search strategy. A further search was conducted using keywords shown in Table 2.2b that are based on the core components of person-centredness and the definition of person-centredness that was used in this study which is discussed in section 2.2 of this chapter. The search was regularly rerun throughout the course of the study to ensure the inclusion of the latest literature. The inclusion period for the updated search was January 2002 to July 2017. The search was limited to articles published in English, relating to humans and adult age group.

Table 2.2: Keywords used for section 2 of the literature review

2.2a: Keywords used in the initial search			
Keywords	Person centred Patient centred Client centred	AND	Accident and Emergency Emergency department Emergency room
2.2b: Keywords used in the further search			
Keywords	Experience of care Values Beliefs Shared decision-making Caring Culture Engagement Therapeutic relationships	AND	Accident and Emergency Emergency department Emergency room

The literature was reviewed by title, abstract, and then full-text for inclusion. Studies were included if they were published in peer-reviewed journals, empirically based and focused on key person-centred aspects in ED. Reference lists were scanned for relevant literature. As there was a broad range of search terms used in the second search, the number of relevant articles retrieved was considerable, and a total of 123 articles were identified as relevant for inclusion. Review of these revealed that there was substantial duplication of findings across the papers. Therefore, whilst still ensuring that all the themes were represented, only those that contributed most significantly to the components of person-centredness in EDs have been used for this review. This process is depicted in Figure 2.1. A total of 78 articles were included. These were assessed for quality using the Critical Appraisal Skills Programme (CASP

2014) and all were retained for inclusion. The findings from the studies relating to person-centredness in EDs are presented in Table 2.5 later in this chapter. The literature varied in terms of country of origin giving a range of findings from different health care systems and cultures. The selected studies were evaluated using thematic analysis to identify themes that were pertinent to person-centred practice in EDs.

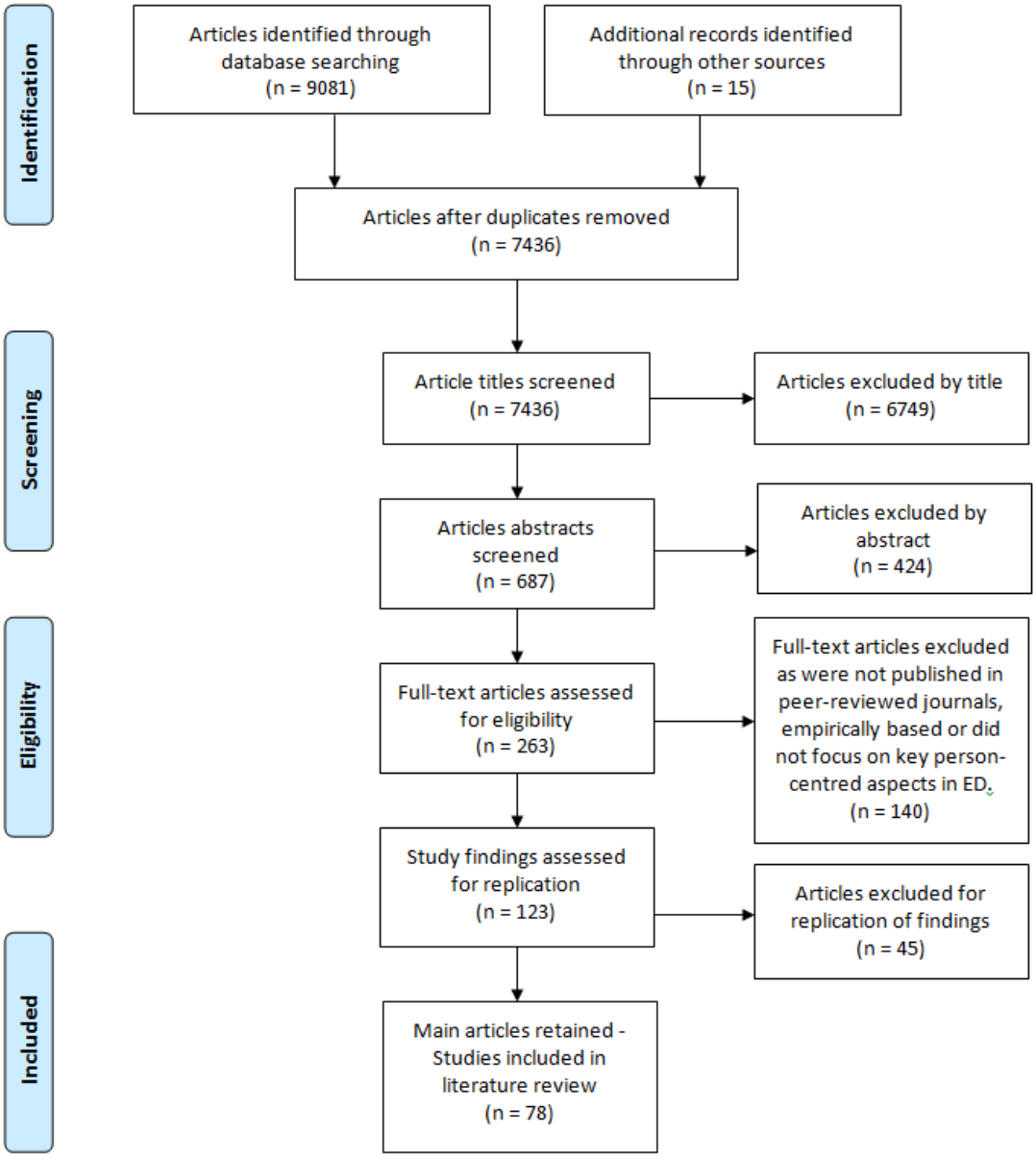

Figure 2.1: Prisma flow diagram of literature selection process

2.2 What is person-centredness - terminology used in the literature

The shift towards *'re-centring'* or putting the client or patient at the centre of care delivery reflects a movement away from the narrow biomedical view, in favour of a broader stance, which reflects a drive towards increasing the social, psychological, cultural and ethical sensitivity of our interactions (Hughes et al. 2008, p455). This movement emerged in response to patient demand for greater choice and autonomy (Hughes et al. 2008), and an attempt to address the limitations in conventional medicine of the biomedical model of care (Mead and Bower 2000), which was paternalistic (Docteur and Coulter 2012), disease orientated, and often fragmented (McCance et al. 2011).

Defining person-centredness is difficult as there appears to be some confusion around the term and what exactly it constitutes (Mead and Bower 2000; Morgan and Yoder 2012; Docteur and Coulter 2012). This may be partly due to the fact that a range of similar expressions appear in the literature without any distinction being made between them (Pelzang 2010). Morgan and Yoder (2012) state that the terms are used interchangeably as the intent of the care delivery is congruent among all, and the individual terms reflect the context in which the care is provided. This is supported by Hughes et al. (2008) who state that the concepts of patient-centredness, person-centredness, client-centredness, family-centredness and relationship-centredness are all required in different contexts and all share commonalities and the same themes.

Slater (2006) and Dewing (2008) disputed that the terms were the same. Slater (2006) claimed that while there were commonalities the connotations behind patient and

client-centredness actually shifted the power balance to the carer, due to the focus being on the illness rather than the person.

The concept of ‘centredness’ appears to have been first applied in practice by Carl Rogers (1961) with his humanistic approach to psychology which emphasised the significance of the therapeutic relationship with the client and client-centred care. The related term ‘patient-centred’ appears to have originated in the medical literature and was first introduced by Balint (1969). According to Morgan and Yoder (2012) Balint described patient-centredness in terms of how doctors should interact with patients as unique individuals. Many subsequent authors have defined it in variable terms with many commonalities including the healthcare provider seeing illness through the eyes of the patient (McWhinney 1989), being guided by the patient’s knowledge and experience (Byrne and Long 1976), and being responsive to their needs and preferences (Laine and Davidoff 1996, Institute of Medicine 2001). Others (Grol 1990; Lipkin 1984; Winefield 1996) have noted the importance of information-giving and shared decision-making in the process and the development of mutual, power-sharing relationships that are collaborative and holistic (Institute of Medicine 2001). According to Govindarajan et al. (2010) definitions of patient-centredness all encompass two fundamental characteristics, that of patient involvement and individualised care. However, they further state that care which encompasses these two characteristics does not in itself equate to patient-centred care. Several authors have progressed the discussion to identify the core elements of patient-centredness which are broadly similar. Mead and Bower (2000) examined the conceptual and empirical literature and identified five conceptual dimensions of the biopsychosocial perspective of understanding the `patient-as-person', sharing power and responsibility, a therapeutic alliance, the ‘doctor-as-person' and paying attention to emotional cues. Stewart et al. (1995) and Stevenson (2002) identified six similar elements and incorporated health promotion and being realistic about personal limitations including time and resources.

Shaller (2007) undertook a systematic review of nine models and frameworks for defining patient-centred care. He identified six core elements that included family and friends which expands the patient-centred concept to those of significance in the patient's world. He further identified seven key factors that contribute to achieving patient-centred care at organisational level to include: a strategic vision clearly and constantly communicated to every member of the organisation; involvement of patients and families at multiple levels; care for the caregivers through a supportive work environment; systematic measurement and feedback; the quality of the built or physical environment; and supportive technology. Table 2.3 summarises the core elements of patient-centredness discussed above.

Table 2.3: The core elements of patient-centredness found in the literature

Mead and Bower (2000)	• Understanding the `patient-as-person' • Sharing power and responsibility • A therapeutic alliance • The doctor-as-person' • Paying attention to emotional cues.
Stewart et al. (1995) and Stevenson (2002)	• Exploring the experience of the illness, • Understanding the whole person • Agreeing consensus on the management plan • Including prevention and health promotion • Developing the doctor–patient relationship • Being realistic about personal limitations, including time and resources
Shaller (2007)	• Education and shared knowledge • Involvement of family and friends • Collaboration and team management • Sensitivity to nonmedical and spiritual dimensions of care • Respect for patient needs and preferences • Free flow and accessibility of information.

Although not actually a model for operationalising patient-centred care, Shaller's (2007) work appears to expand the concept of patient-centredness as it highlights the context of care and organisational systems involved as being significant for its delivery. Binnie and Titchen (1999) undertook work to transform a traditional task-based environment into one of patient-centred nursing. While they did not use a

formalised framework, their work on patient-centredness acknowledged the significance of the skilled nurse, the contribution of family members, the impact of organisational systems and the need for nurses to work in an environment with supportive managerial systems which were not constraining or dehumanising. The recognition of these aspects broadens the concept of patient-centredness much wider and reflects more closely on the literature of person-centredness.

According to Dewing (2008), moving from patient-centredness to person-centredness is not merely a shift in terminology. The concepts of person-centredness and relationship-centredness appear to be more developed and refined with several frameworks developed for their operationalisation into practice. Kitwood (1997) first promoted the idea of person-centred care in his work with patients with dementia, proposing an alternative to the existing standard technical/medical paradigm where the *"person comes first"* (p2). Dewing (2008) states that central to Kitwood's idea of person-centredness sits a philosophical and theoretical appreciation of what it is to be a person, or personhood which he described as:

> *"..a standing or status that is bestowed upon one human being, by others, in the context of relationship and social being. It implies recognition, respect and trust"* (Kitwood 1997, p8).

Kitwood (1997) drew on Buber's work (p10) which contrasted the difference in "I-it" and "I-thou" relationships. According to Baldwin and Capstick (2007, p225) Buber's idea of "I-thou" is closely linked to the concept of personhood and involves meeting another with *"awareness, openness, presence and grace"*. McCormack and McCance (2010) also recognised the concept of personhood. However, they highlighted the complexity of its philosophical underpinnings offering four different *"lenses"* (p5) through which it could be viewed, which ultimately affects how the concept is applied in practice. These lenses are a hierarchy of attributes, the ability to reflect on actions,

the moral good of persons, and embodied engagement with others. McCormack and McCance (2010) recognised the contribution of each and drew them together through the *"unifying concept of authenticity"* which is underpinned with notions of individualism and autonomy (McCormack and McCance 2010, p19). According to McCormack (2003) however authenticity is much more than respecting individualism and individualised care. Rather it involves respecting the person to reach decisions that are genuinely their own which reflect their beliefs and values and are integrated into their own biography. Nolan et al. (2004) argued that the ideas of promoting individualism and autonomy were not always achievable and did not adequately capture the experiences of many older people. In fact, he suggested that they may actually disadvantage the most vulnerable members of society for whom these principles are often not achievable (Nolan 2001). Instead he argued for the consideration of interdependence and reciprocity, and felt that person-centred care failed to adequately recognise the value of relationships. He proposed that relationship-centred care as an extension of person-centred care was a more suitable approach for older persons, which according to Tresolini et al. (1994) reflects the importance of the interaction among people as the foundation of any therapeutic or healing activity. Nolan's rejection of person-centred practice was disputed by McCormack (2004) and Dewing (2008). McCormack (2004) highlighted how Kitwood's definition of personhood captured the intrinsic worth of persons, while recognising that they do not exist in isolation, thereby acknowledging the significance of relationships. He further argued that indeed Kitwood's definition also encompassed context, place and self and therefore was actually the more inclusive term. In McCormack's own work with McCance the term person is defined as:

> *'all those involved in a caring interaction and therefore encompasses patients, clients, families/carers, nursing colleagues, and other members of the multidisciplinary team'.* (McCormack and McCance 2010, p4).

This is echoed by Dewing (2008) who states that while models such as Nolan's (2004) have been developed to address inadequacies in Kitwood's work, which ignores carers, families and to some degree staff, this is not a sound argument as Kitwood's objective is a moral concern for all, not just the individual. McCance et al. (2011) highlight how in McCormack and McCance's (2010, 2017) concept of person-centredness their staff colleagues are as significant as patients which for them reflects the potential impact that staff relationships and team effectiveness have on creating a therapeutic environment. McCance et al. (2011) summarised the definitions and their terms related to person-centredness and which has been reproduced with permission in Table 2.4.

Dewing (2008) identifies that McCormack's (2003) work is the only one which addresses the broader aspects of the workplace culture which influences care practices. The Person-Centred Practice Framework (PCPF) (McCormack and McCance 2010, 2017) was derived from this work and the inclusion of the care environment as one of the four domains signifies the importance they place on it for the provision of person-centred practice. Indeed, Laird et al. (2015) and McCormack and McCance (2017) state that the care environment, which consists of layers of cultures, has the greatest potential to limit or enhance the delivery of person-centred practice.

Due to its ability to incorporate all the previously discussed elements, as noted in chapter 1, the definition for person-centredness adopted for this study is as follows:

> *"An approach to practice established through the formation and fostering of therapeutic relationships between all care providers, service users and others significant to them in their lives. It is underpinned by values of respect for persons, individual right to self-determination, mutual respect and understanding. It is enabled by cultures of empowerment that foster continuous approaches to practice development".* (McCormack and McCance 2017, p.3).

Table 2.4: Definitions of Person-Centredness and Related Terms (McCance et al. 2011)

Terms	Description
Person-centred Care	"an approach to practice established through the formation and fostering of therapeutic relationships between all care providers...patients and others significant to them in their lives. It is underpinned by values of respect for persons, individual right to self-determination, mutual respect and understanding. It is enabled by cultures of empowerment that foster continuous approaches to practice development" (McCormack et al. 2010, p13).
Patient-centred care	"...understanding the personal meaning of the illness for the patient by eliciting their concerns, ideas, expectations, needs, feelings and functioning; promoting the understanding of the patient within their unique psychosocial context; sharing power and responsibility, and developing common therapeutic goals that are concordant with the patient's values" (Drach-Zahavy 2009, p1465).
Family-centred care	"a way of caring for children and their families within health services which ensures that care is planned around the whole family, not just the individual child/person and in which all the family members are recognised as care recipients" (Shields et al. 2006, p1318).
Relationship-centred care	"… all parties involved in caring (the older person, family carers, and paid or voluntary carers) should experience relationships that promote a sense of: • security – to feel safe within relationships; • belonging – to feel 'part' of things; • continuity – to experience links and consistency; • purpose – to have a personally valuable goal or goals; • achievement – to make progress towards a desired goal or goals; • significance – to feel that 'you' matter" (Nolan et al. 2004, p49).
Woman-centred care	"Focuses on the woman's individual needs, aspirations and expectations, rather than the needs of the institution or professionals" (Leap 2009 p12).

The theoretical framework underpinning this study is the Person-centred Practice Framework (PCPF) developed by McCormack and McCance (2010). It was chosen for its comprehensiveness and ability to address the components of person-centeredness that others did not, such as the inclusion of staff and the context of

practice. Since the study commenced in 2011 the PCPF has been further developed with some subtle changes to a few of the constructs (McCormack and McCance 2017). The main addition however, is recognition of the macro-context within which person-centred practice is developed, which takes account of health and social care policy, strategic frameworks, workforce developments and strategic leadership. This recognises how the wider system impacts on and influences the growth and development of person-centredness at micro-systems level (McCormack and McCance 2017). The PCPF consists of four domains which are composed of 17 constructs and is presented below in Figure 2.2:

- Prerequisites are the attributes of staff and include: being professionally competent; having developed interpersonal skills; commitment to the job; having clarity of beliefs and values; and knowing self.
- The care environment relates to the context in which care is delivered and includes: appropriate skill mix; shared decision-making systems; effective staff relationships; supportive organisational systems; power sharing; and the potential for innovation and risk taking.
- Person-centred processes focus on delivering care through a range of activities and include: working with the patient's beliefs and values; engaging authentically; sharing decision making; being sympathetically present and providing holistic care.
- McCormack and McCance (2017) contend that certain attributes and an appropriate care environment in which to deliver effective care processes must be present in order to achieve effective person-centred outcomes for patients and staff. These include: a good care experience; involvement in care; a feeling of well-being and the existence of a healthful culture.

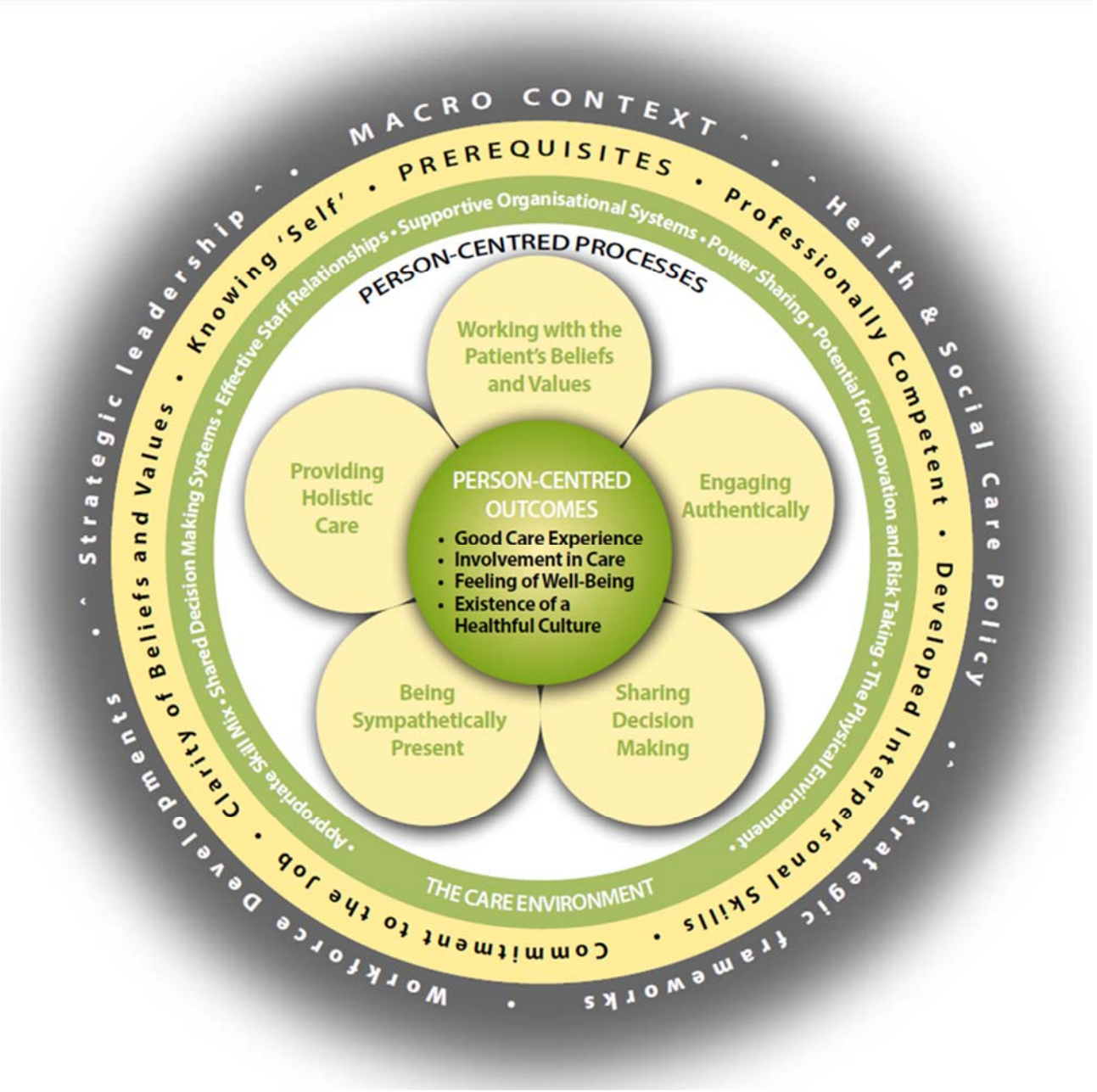

Figure 2.2: The Person-Centred Practice Framework (McCormack and McCance 2017)

2.3 Care in the Emergency Department

This section reviewed the literature on person-centeredness in emergency departments. It used search terms generated from the definition of person-centredness above and the constructs within the PCPF (McCormack and McCance 2017, p.3) to conduct an extensive review of the existing literature. Analysis of the literature revealed six themes that could be described as characteristic of components of person-centredness within EDs. These were *medical-technical intervention; a culture of worthiness; managing the patient journey; nurse/doctor relationships; patients and relatives experience of care* and *a stressful environment.*

Table 2.5: Literature relating to themes and key findings

Study and origin	Study design	Themes	Key findings
Adeb-Saeedi (2002) Tehran	Qualitative descriptive design	A stressful environment	There was a high rate of verbal and physical aggression and violence encountered by nurses. The highest scoring stress items for emergency nurses are dealing with patients' pain and suffering, family presence in the ED, relatives' reactions, heavy workloads, time pressure and death and dying.
Adriaenssens et al. (2011) Belgium	Complete two-wave panel design	A stressful environment	Work conditions change considerably within a relatively short time-frame. There was a high turnover of staff and 20% of staff had left their workplace between time 1 and time 2.
Andersson et al. 2012 (Sweden)	Qualitative exploratory study design	Managing the patient journey through ED	Nurses find it difficult to provide individualised care due to performing other tasks. Meeting basic patient needs becomes a task for unqualified staff.
Andersson et al. (2014) Sweden	Qualitative exploratory design	Medical-technical intervention A culture of worthiness	ED care is focused on emergency and life-saving interventions. Medicine and nursing are from different paradigms and medical paradigm dominates in ED.
Angland et al. (2014) Ireland	Qualitative approach	A stressful environment	The main reasons for violence and aggression were waiting times, overcrowding, layout, lack of communication and staff attitudes towards patients, particularly at the end of a long shift or those who were deemed not appropriate to be there.

Study and origin	Study design	Themes	Key findings
Bailey et al. (2011) UK	Qualitative study drawing on ethnographic methods.	A culture of worthiness	Palliative care has low status in ED. There is a feeling that death is 'out of place' yet it is common with trauma. ED teams are meticulously trained for resuscitation but not for patients at end-of-life.
Beckstrand et al. (2008) USA	Survey	A culture of worthiness	More time is needed to care for patients at end-of-life, family presence should be encouraged, the environment does not meet these patient's needs – more privacy and comfort is needed. Pain needs to be better managed and staff need to have awareness of any advance directives.
Bergman (2012) USA	Qualitative method informed by grounded theory	A culture of worthiness Managing the patient journey through ED Patients and relatives experience of care A stressful environment	Staff are over-whelmed due to patient volume, 'boarding' patients, the need for continuous prioritisation, lack of staff and inability to control patient flow. There is frustration at perceived abuse of ED and patients are referred to as "frequent fliers" and "regulars". A perceived lack of control is cited as a primary reason why colleagues quit or transfer out of the ED.
Botes and Langley (2016) South Africa	Quantitative descriptive, design study	Patients and relatives experience of care	Aspects that relatives needed in ED were: 'meaning' - the need for honest information, to feel there is hope, to be assured of the best care for their relative; 'communication' - need to talk to a nurse, to be kept updated; 'proximity' - to be able to see their relative; 'comfort' and 'support' were not ranked as being highly important.

Study and origin	Study design	Themes	Key findings
Bridges (2008) UK	Narrative methodology (discovery interview technique)	A culture of worthiness Patients and relatives experience of care	Patients and their relatives described a feeling of not mattering, fear and anxiety, lack of continuity of care and discharge. They highly valued a person-centred approach from staff, the presences of their relatives and help and information tailored to their needs. The ED environment was not suited to their needs with a lack of privacy and uncomfortable stretchers.
Chang et al. (2016) Taiwan	Qualitative approach	Medical-technical intervention	Discharge planning is not given much attention instead nurses focus on the visible practical requirements such as catheter removal etc. on discharge. The culture does not encourage discharge planning – priorities are the acute phase of treatment and life-threatening problems. Heavy workloads prevent it being a focus.
Cluckey et al. (2009) USA	Qualitative approach	Patients and relatives experience of care	Family members appreciated staff using a sound knowledge-base and interpersonal skills. Family members were sensitive to the nonverbal behaviours - tone of voice, pace and force of actions taken, and the ability to engage in active listening, nurses taking care of the patient, being present and fully engaged with them in the moment and small actions giving physical comfort.
Coughlan and Corry (2007) Ireland	Qualitative approach	Managing the patient journey through ED Patients and relatives experience of care	The environment was compared to what would have expected to find in a low-income country; overworked staff, overcrowding, trolleys and chairs lined up with patients awaiting admission, no privacy, unhygienic and lack of resources.

Study and origin	Study design	Themes	Key findings
			Some patients were so distressed by the treatment they received that they were terrified of returning to the ED.
Crilly et al. (2004) Australia	Descriptive longitudinal cohort design study	A stressful environment	Precipitating factors associated with violence included waiting times, alcohol, drugs and behaviour associated with mental health illness.
Dominguez-Gomez and Rutledge (2009) USA	Exploratory comparative design	A stressful environment	The most commonly reported symptoms of stress for ED staff were intrusive thoughts about patients, avoidance of patients, difficulty sleeping or being easily annoyed.
Duran et al. (2007) USA	Descriptive survey design	Patients and relatives experience of care	Most staff supported family presence in ED. Nurses had more positive attitudes towards this than doctors. Family members felt it was their right to be present during loved one's care and treatment. Patients also felt that it was their right to have family present and it would be a comfort and they should be given the option.
Elmqvist et al. (2011) Sweden	Phenomenology	Patients and relatives experience of care	Staff are interested in the physical aspect only and patients are rapidly examined for assessment of life-threatening conditions. There is a security in this about physical care but it also engenders feelings of insecurity and abandonment.
Elmqvist et al. (2012) Sweden	Phenomenology	Medical-technical intervention	ED staff adopt accepted attitudes in an attempt to bring order to an unpredictable environment. The unpredictability of ED is exciting and

Study and origin	Study design	Themes	Key findings
		A culture of worthiness Managing the patient journey through ED Nurse/doctor relationships	challenging but also creates stress. Life-saving has the highest priority and staff are always in readiness for this. Work adopts a performance focus. Nursing staff are forced to be accessible to patients while waiting for the doctor to come. They need to continue caring for waiting patients as well as see new ones to maintain control of patient flow. Nurses find it stressful when the doctor does not come as they do not know what to tell the patients about waiting times.
Fernández-Sola (2017) Spain	Hermeneutic phenomenological approach	A culture of worthiness	Terminally ill patients attend ED which does not always meet their needs. There is a lack of facilities, time to spend with patients and privacy available. Patients do not receive individualised care, and staff have no previous links with the patient and family
Frank et al. (2009) Sweden	Phenomenography	Patients and relatives experience of care	Patients felt in a power struggle and marginalised and did not have the contact with staff they would have liked. They used different strategies to gain recognition – persistent calling or sending relatives to or shouting and becoming aggressive or registering a complaint.
Fry (2012) Australia	Ethnography	A culture of worthiness	Experienced triage nurses hold beliefs of how patients should behave that can impact on their practice. When these are breached there were negative consequences for patients who are not aware of these cultural expectations. The beliefs appear to result from notions of worthiness but are driven by notions of privacy, safety respect and equity.

Study and origin	Study design	Themes	Key findings
Fry et al. (2014) Australia	Qualitative study	Patients and relatives experience of care	ED nurses have expectations of carers – they were judged as supportive and helpful when they saved nurses time but demanding when they took up time. They were used as a knowledge resource to provide information. At times nurses felt they got in the way of treating the patient, by being there and by limiting open communication with the patient.
Gallagher et al. (2014) Australia	Qualitative approach	A culture of worthiness Patients and relatives experience of care	There is a clash of expectations between what ED staff can provide and what family expect. They need to prioritise emergency care over basic needs and appreciate it when family understand this. Family are seen to be a potential safety net for staff to look after their relatives in ED.
Gilchrist et al. (2011) Australia	Retrospective survey	A stressful environment	Participants felt that violence had increased over the duration of their time working in the ED. Reasons given were alcohol, drug use, waiting times, mental illness, lack of understanding of the system.
Grudzen et al. (2012) USA	Grounded theory	A culture of worthiness	The ED role is to stabilise patients with acute illness or injury for definitive care. The ED environment and culture is unique. Doctors have limited understanding and knowledge of palliative care and a fixed view of the role of the emergency provider. They meet patients for first time and feel unclear as to what their role is. There is a need to practice defensive medicine.

Study and origin	Study design	Themes	Key findings
Heaston et al. (2006) USA	Survey	A culture of worthiness	Obstacles to providing end-of-life care were heavy nurse workload and privacy. Family behaviours were also an issue including dealing with angry or distraught members, frequent phone calls for patient condition updates, wanting to initiate or continue life-sustaining measures even though the patient had advanced directives requesting not, and families not accepting the patient's prognosis.
Hillman (2014) UK	Ethnography	A culture of worthiness	Patients are categorised on the basis of medical and moral criteria and perceived moral worth. This process provides staff with a means to have control over what they determine to be inappropriate demands for the service. There are correct rules of patient behaviour and patients can be classed are 'legitimate' patients or not.
Hislop and Melby (2003) UK	Phenomenology	A stressful environment	Staff saw themselves as being there in a caring capacity and could not understand why they should be the target of such verbal outbursts and physical abuse. Staff felt management did not understand what they faced daily.
Hoyle and Grant (2015) UK	Case study approach	Managing the patient journey through ED	Staff reported pressure to meet targets with inadequate staffing levels and monitoring of performance, switching care to focus on time rather than clinical need. They feel consistent pressure from monitoring of their performance.

Study and origin	Study design	Themes	Key findings
Hunold et al. (2016) USA	Cross-sectional study	Patients and relatives experience of care	Patients prioritised appropriate treatment, accurate diagnosis, and timely care, competent staff and providers, desirable health outcome, time to provider evaluation, and discharge to home.
Hyland et al. (2016) Australia	A multimethod study	A stressful environment	The majority of ED nurses had experienced verbal or physical abuse in the past year – being pushed, spat at, punched and kicked. The main aggressors were patients with challenging behaviours.
Innes et al. (2014) Australia	Mixed methods approach	A culture of worthiness	There were large numbers of bank and agency staff working there who are unfamiliar with ED. More education is needed for staff working with mental illness. ED is noisy with time pressures and long waiting times and is not a suitable environment for treating mental illness.
Johansen (2014) USA	Qualitative approach	A stressful environment	Staff experience conflicting priorities which impact on their work stress and patient care. There is an imbalance of staffing levels to patient flow, there are unrealistic expectations - staff feel management don't understand and just see numbers and times. Staff avoid conflict as there is no time to address the issues.
Kansagra et al. (2008) USA	Survey design	A stressful environment	The consequences of workplace violence for the emotional well-being of staff include anger, anxiety, fear, and decreased job satisfaction.

Study and origin	Study design	Themes	Key findings
Karro et al. (2005) Australia	Exploratory design within a qualitative approach	Patients and relatives experience of care	Privacy breaches included overhearing others' conversations, seeing others' body parts or perceiving that they are overhead or seen. A minority of patients withhold information for fear of being overheard.
Kelley et al. (2011) Canada	Focused ethnography	Patients and relatives experience of care	ED was fast-paced, overcrowded, noisy, chaotic and lacked privacy. There was often unmet need – emotional reassurance was not always given, patients were cold, hungry and thirsty. ED had a lack of adequate equipment. Patients were unhappy about being nursed in hallways. Staff need to take more time and use simpler language when giving information, especially at discharge. Patients appreciated care when they received it.
Khokher et al. (2009) Canada	Qualitative approach	Nurse/doctor relationships Patients and relatives experience of care	Relationships with patients varied due to ability to control volume and pressure to see as many as possible meant time spent was brief and interaction not meaningful. Doctors are buffered from negative interactions due to their status. Nurses bore the main criticism from patients.
Kihlgren et al. (2004) Sweden	Grounded theory	Medical-technical intervention Patients and relatives experience of care	There was a medical-technical culture and attention was focused on the medical condition. Nursing care was characterised as meeting medical and technical demands Patients were often more worried about their social condition than medical one. They greatly appreciated eye contact, and time taken to listen.

Study and origin	Study design	Themes	Key findings
Kihlgren et al. (2005) Sweden	Observational study	Medical-technical intervention Managing the patient journey through ED	Prioritising medical care, lack of time, workload, inexperienced doctors, working with death, poor referral documentation all prevent good care. There is an imbalance between inflow of patients and outflow in the ED.
Kongsuwan (2016) Thailand	A hermeneutic phenomenological approach	A culture of worthiness	Extreme effort is made to defy death and preserve life for all in ED. Resuscitation is aggressive and can create a chaotic and violent environment. Palliative care also focuses on saving life in ED. Dying there defies the ED culture of care and represents a medical model of care. Care of relatives of critically ill is inadequate.
Laposa et al. (2003) Canada	Secondary analysis of previously reported data	A stressful environment	The interpersonal environment was a source of stress for staff. Stress was created mostly by organisational factors with actual patient care being less stressful.
Lau et al. (2012) Australia	Contemporary ethnography	A stressful environment	Busyness and long waiting times are important contributory factors to violence however human interaction factors have a more profound influence on it.
Limbourn and Celenza (2011) Australia	Prospective cross-sectional study	Patients and relatives experience of care	Patients most valued being attended to promptly by a friendly doctor who was caring, concerned and attentive while appearing to work thoroughly, efficiently and competently, being listened to and receiving thorough explanation of their treatment, diagnosis and any advice given

Study and origin	Study design	Themes	Key findings
			to them and having the opportunity to ask questions answered in simple language.
McAllister et al. (2002) Australia	Survey	A culture of worthiness	There was a generally negative attitude towards clients who deliberately self-harm. Respondents felt helpless in dealing with the problems of these clients. If staff perceive themselves as skilled to address the needs of clients who deliberately self-harm, they are more likely to feel worthwhile working with such clients and less likely to demonstrate negative attitudes.
McCarthy et al. (2013) USA	Cross-sectional survey	Patients and relatives experience of care	Patients felt that communication in ED was good and that they were being treated respectfully but that they would like to have more involvement in decision-making and more opportunities to ask questions.
Marynowski-Traczyk and Broadbent (2011) Australia	Hermeneutic phenomenology	A culture of worthiness	The high-stimulus, highly technological ED environment is not conducive to mental health patients and ED nurses are poorly prepared for them. ED nurses find these “revolving door” patients frustrating.
Möller et al. (2010) Sweden	Phenomenograpy	Medical-technical intervention Patients and relatives experience of care	Patients had a fear of being forgotten in the waiting room and a feeling of not being welcome as there were too many patients there already. Staff concentrated on medical issues and forgot the patients’ psychological needs.
Morphet et al. (2015) Australia	Qualitative exploratory descriptive design	Medical-technical intervention	Interactions with patients were mostly undertaken when carrying out medical procedures. The quality of communication with

Study and origin	Study design	Themes	Key findings
		A culture of worthiness Patients and relatives experience of care	ED staff is important to relatives. Relatives frequently felt *"like a spectator"* and were excluded from their loved one's care or decisions made about them.
Muntlin et al. (2010) Sweden	Qualitative approach	Medical-technical intervention A culture of worthiness Managing the patient journey through ED	Staff objectified patients and spoke of them as conditions. They claimed non-urgent patients shouldn't be there and hindered their ability to do good work. The ED culture valued 'doing' and getting the patient through the system.
Musso et al. (2015) USA	Qualitative approach	Patients and relatives experience of care	A large percentage of patients were discharged without adequate understanding of their diagnosis, treatment or discharge information.
Nugus et al. (2014) Australia	Ethnography	Managing the patient journey through ED	ED has an inflexible work capacity and space leading to overcrowding which reduces efficiency and increases the risk of medical error leading to adverse events. Staff had to manage their time across several patients to minimise the impact of waiting time leading to fragmented care.
Nydén et al. (2003) Sweden	A life-world interpretative approach	Patients and relatives experience of care	Safety needs dominated. It was vital patients could trust the competence of the staff. When waiting times were long patients felt feelings of insecurity and unsafeness. Patients tried not to bother the nurses unnecessarily. Some tried to develop a better relationship with staff by joking with them. Patients appreciated nurses being kind and friendly.

Study and origin	Study design	Themes	Key findings
Nyström (2002) Sweden	Case study approach within a hermeneutic tradition.	Medical-technical intervention A culture of worthiness Nurse/doctor relationships	A lack of a holistic perspective was found. Nursing is not valued but medical, concrete tasks are. Nurses did not want supervision in nursing related aspects, they wanted it in medical and technical tasks. A caring attitude was interpreted as a personal characteristic. Non-urgent patients are too demanding during busy periods. Nurses are socialised by the social authority and status of medicine. Doctors are often irritated when nurses do not direct some patients to other forms of care
Nyström et al. (2003a) Sweden	Case study approach within a hermeneutic tradition.	Medical-technical intervention Nurse/doctor relationships Patients and relatives experience of care	Care is fragmented. ED nursing was perceived as extension of medicine and the nurses appeared to not appreciate nursing. Medical goals are distinct, nursing's are not. Care is medically orientated and caring was not seen as important. Patients' try to be 'good' patients. They are aware of ED demands and attempt to adapt their behaviour to fit with the ED environment.
Nyström et al. (2003b) Sweden	Qualitative approach	Patients and relatives experience of care	For non-urgent patients the situation is fragmented and it is difficult to make themselves seen or heard. Nurses involve them in their problems, they feel unable to express their needs, attention varies according to nurses on duty and their next of kin is given a nursing function. They maintain integrity by keeping critical reflections to themselves, directing dissatisfaction elsewhere and by being a 'good' patient.

Study and origin	Study design	Themes	Key findings
Palonen et al. (2016) Finland	Descriptive qualitative design	Patients and relatives experience of care	Relatives felt ostracised and cut off from the patients. They were a resource for ED staff when present but little effort was made to contact them when not. The onus was on relatives to contact the ED.
Parke et al. (2013) Canada	Three phase interpretive, descriptive exploratory design	Patients and relatives experience of care	Dementia patients are under-triaged as they are unable to explain their symptoms. Dementia is not considered when assessing acuity. Patients are anxious due to lack of information and not understanding the triage process. There are lengthy waits with little staff contact or communication. Caregivers were left to calm and look after patients. The chaotic ED environment was not suitable for dementia patients. There was neglect of basic care needs such as food, water and toileting.
Person et al. (2012) USA	Ethnography	Medical-technical intervention A culture of worthiness	There is a culture unique to ED. The phrase, ‘‘the way we do things around here’’ demonstrates the ingrained values, beliefs, norms, and expectations of members within an organisation or work unit. ED is high volume, fast paced, unpredictable. Staff find the work mostly rewarding.
Pich et al. (2011) Australia	Qualitative approach	Nurse/doctor relationships A stressful environment	Nurses are most at risk of patient-related violence. Nurses were treated differently to doctors by patients. Nurses reported a sense of inevitability regarding patient-related violence and reported feeling degraded, frustrated and powerless, upset and disheartened. They

Study and origin	Study design	Themes	Key findings
			recognised that the staff could contribute to patient violence and aggression.
Pinar and Ucmak (2011) Turkey	Survey using a cross-sectional descriptive design	A stressful environment Staff: the personal cost to self	Verbal violence was experienced by most nurses and many had also been subjected to physical violence. Patients' relatives were the main perpetrators, followed by patients, males were more likely perpetrators than females. There is under-reporting The main reason, given was that they believed their reports would not be taken seriously and they felt lack of support in this area. Those who did report episodes reported either getting no response or ineffective responses. Nurses found support among colleagues (nurses and doctors) rather than management. The second reason was apathy suggesting it had become part of the job. Workplace violence has negative consequences, and worry, fear and anxiety of being exposed to verbal and physical violence was common among nurses – they described anxiety at fear of it happening again. This may be cultural aspect as in Turkey women are vulnerable to violence due to their position in society and it is considered as private and intertwined with family honour and fear of retaliation.
Shoqirat (2014) Jordan	Qualitative approach	Medical-technical intervention	Most ED nurses do not see health promotion as part of their workload – it is seen as a low priority and a job for others. They feel they are too busy with clinical roles. They feel they lack expertise in this area.

Study and origin	Study design	Themes	Key findings
Samuels-Kalow et al. (2016) USA	Qualitative interview study	Patients and relatives experience of care	Patients experienced unmet need. Participants felt there was a lot of medical jargon used, more written and visual discharge information was needed. They felt that they were not being listened to and needed a relative there. They would have liked follow-up letters.
Sanders et al. (2011) UK	Narrative Case Study	Managing the patient journey through ED Nurse/doctor relationships	ED has a culture that is subject to externally-determined time targets that are enforced by a top-down system of surveillance and management. There is a power difference between doctors and nurses in ED. Nurses have responsibility for patient throughput and patients breaching targets, yet have very little power to control this.
Sawatzky and Enns 2012) Canada	Survey design	A stressful environment	Engagement was a key factor in nurse retention in ED and a significant predictor of intention to leave. Engagement was comprised of factors relating to nursing management, professional practice, collaboration with physicians, staffing resources and shift work.
Sbaih (2002) UK	Observational study	A culture of worthiness Managing the patient journey through ED	ED nurses hurry their colleagues and network with other settings to ensure that each patient receives appropriate care but that none of them take up more time than they need as this will mean time to see other patients is reduced. When numbers increase nurses are sensitive to minor injury work being less significant than major injury work.

Study and origin	Study design	Themes	Key findings
Skar et al. (2015) International literature	Scoping study	Medical-technical intervention A culture of worthiness	Five main values and beliefs were identified - EDs are for urgent cases; older adults are not a priority in the ED; there is not enough time to address the complex care needs of older adults; well-functioning teams are important for both patients and staff satisfaction and they are competent in looking after acute situations but are not as competent at addressing basic nursing care. The ED micro-culture is a barrier to optimal older care.
Smith et al. (2009) USA	Grounded theory	A culture of worthiness	The ethos of palliative care conflicted with the ED culture. Patients waited for lengthy periods as they were not a priority. Rooms were stark with stretchers. Drunk or aggressive patients were treated nearby. Doctors had inadequate training in pain management.
Soleimanpour et al. (2011) Iran	Cross-sectional study	Patients and relatives experience of care	General satisfaction of clients is high, although there are unmet needs. The two important factors that influenced patient satisfaction seem to be the waiting time and staff service and courtesy. There was a high level of satisfaction with physicians' courtesy and behaviour and nurses' and security guards' courtesy with patients.
Stathopoulou et al. (2011) Greece	Descriptive correlational design	A stressful environment	ED nurses reported having sleep disturbances, anxiety and depressed mood due to their work. Approximately one quarter of participants reported their sleep disorders and depressed mood to be very severe.

Study and origin	Study design	Themes	Key findings
Stiffler and Wilber (2015) USA	Cross-sectional cohort study	Patients and relatives experience of care	Patients treated in hallways due to overcrowding were significantly less satisfied with their overall ED experience than those treated within the department. The actual location of treatment is one of the largest impediments to higher satisfaction.
Tan et al. (2015) Singapore	Qualitative approach	A stressful environment	Nurses reported feeling upset, resentment, job dissatisfaction, not feeling appreciated, and having recurrent thoughts about what could be done better. Nurses were able to assess and predict aggressive behaviour. There is poor organisational support and responsiveness to aggression.
Taylor et al. (2015) Canada	Ethnographic study	A culture of worthiness Managing the patient journey through ED	The ED culture involved assessing and juggling changing priorities in a rapid and unpredictable environment. Older people tended to drop in the priorities when busy and personal care was relegated. Nurses communicated the demand to work quickly and efficiently under pressure and get patients out quickly. Older people did not fit into this culture and they were incongruent with ED nurses' expectations of ED nursing. Their slow pace and complex needs conflicted with the pressure to move rapidly from one patient and task to the next. When care changed to basic care some nurses were not interested. Nurses are immersed in this culture which defaults to priority and flow and this is evident in their values and beliefs.

Study and origin	Study design	Themes	Key findings
Totten et al. (2014) USA	Cross-sectional survey	Patients and relatives experience of care	Relatives play a valuable role for patients in ED for transport, emotional support, practical help, communication with staff and advocacy.
Winman and Wikblad (2004) Sweden	Non – participant observation	Medical-technical intervention	Aspects of uncaring were more common than caring. Nurses tended to engage with patient only when carrying out doctor's instructions. They concentrated on physical tasks and showed physically caring behaviours more often that affective caring behaviours.
Wolf et al. (2014) USA	Qualitative descriptive exploratory design	A stressful environment	There is a culture of acceptance of workplace violence in ED. Causes include long waiting times, mental illness, patients with a history of violence, and drugs or alcohol. Staff feel unsupported by management and the judicial system. There is an attitude that nurses should accept it as part of the job and get on with it.
Wright et al. (2003) USA	Survey design	A culture of worthiness	There is a basic tension between ED work and needs of patients with serious mental health problems. The ED environment is fast paced and chaotic and can exacerbate symptoms. Negative attitudes are quite prominent among ED staff.
Wright et al. (2017) USA	Participatory action research	A culture of worthiness	Barriers to effective palliative care included noise, lack of time, other demands, difficulties in knowing who and when to refer, difficulties knowing how to talk to patients and relatives, limited formalised palliative care education, difficulties addressing emotional responsibilities and the complex needs of older patients. Staff

Study and origin	Study design	Themes	Key findings
			struggled to understand the concept of the provision of palliative care in ED.
Yoon and Sok (2016) South Korea	Cross-sectional descriptive design	A stressful environment	Verbal abuse, physical threats and violence, and how these were managed influenced the burnout and job satisfaction of ED nurses. Alcoholism, drug abuse, mental disorders were contributing factors. Post-violence management was poor and staff tolerated or adapted to it. Perpetrators were patients but also staff in particular doctors.

2.3.1 Medical-technical intervention

The literature revealed that there was a distinct culture within the ED where staff appeared to hold values and beliefs particular to this setting, which influenced how they approached their work. Kihlgren et al. (2004), Muntlin et al. (2010) and Skar et al. (2015) all revealed a common finding of a medical-technical environment where value was placed on technology, medical status and patient throughput over caring. Two studies (Elmqvist et al. 2012, Person et al. 2012) highlighted how this was a cultural norm which ED staff employed to help them cope with working in an unpredictable, stressful environment. Nyström et al. (2003a) referred to this as conveyor belt style nursing. ED staff viewed the purpose of their role as one of saving lives, and felt that they were there to deal with emergencies and acutely ill patients which they found rewarding and exciting (Nyström 2002; Elmqvist et al. 2012; Person et al. 2012). Interactions with patients were mostly undertaken when carrying out medical tasks or undertaking doctor's instructions (Winman and Wikblad 2004; Morphet et al. 2015). The high value placed on performing medical tasks meant that nursing care had become an extension of medical care with nursing expertise not being perceived as important by ED nurses (Möller et al. 2010; Nyström et al. 2003a). This was reinforced by a number of studies which found that when ED nurses spoke of expertise and competence they were referring to highly developed technical skills and medical tasks rather than competence in caring (Nyström 2002; Nyström et al. 2003a; Winman and Wikblad 2004). Two studies identified that the culture in ED meant that aspects such as health promotion (Shoqirat 2014) and discharge planning (Chang et al. 2016) were given low priority and not seen as part of an ED nurse's work.

Two Swedish studies highlighted the contrast between nursing and medical paradigms and found that in ED the medical paradigm dominated (Nyström 2002;

Andersson et al. 2014). Indeed, Nyström (2002) found that ED nurses had become totally involved in the paradigm of medicine and did not even recognise the nursing paradigm. An example of this attitude was found in a Swedish study involving twenty patients aged over 75 years (Kihlgren et al. 2005, p605) where a nurse stated:

> *"It is difficult with nursing care. It is secondary for me as I am working in an ED…... We are not good at giving nursing care. We are trained in acute care, giving nursing care does not come automatically".*

Caring was considered to be a personal characteristic as opposed to part of nursing care in ED (Nyström 2002). The focus of care was to get patients to the end goal, which was an encounter with the doctor (Kihlgren et al. 2004; Elmqvist et al. 2012). Kihlgren et al. (2004) described this as praxis orientated nursing care, which was delivered to fulfil its objective - that of meeting medical and technical demands with no engagement or sense of being with the patient in any meaningful way.

2.3.2 A culture of worthiness

The literature also identified a belief system where patients were valued for their legitimacy to be treated within the ED. Staff there were always in readiness for lifesaving (Elmqvist et al. 2012; Andersson et al. 2014; Taylor et al. 2015) and described their work as running in a sprint race, performing quick measures for acutely ill patients (Elmqvist et al. 2012). Some patient groups however presented a challenge for ED staff. Studies from Sweden, USA and UK all found that those with minor or routine complaints or conditions that could have been treated elsewhere were a frustration to staff and caused feelings of resentment (Muntlin et al. 2010; Person et al. 2012; Andersson et al. 2014; Sbaih 2002) and took their attention away from the job of saving lives. Such patients were referred to in terms of *"regulars"* (Bergman 2012, p222) and having *"banal complaints"* (Nyström 2002, p415). Two ethnographic

studies undertaken by Fry (2012) in Australia and Hillman (2014) in the UK found that staff held collective beliefs about which patients were considered worthy of ED care. Fry (2012, p124) referred to patients who were *"right"* and *"good"* while Hillman (2014, p487) termed them as "*legitimate"* patients. Patients attending who breached these beliefs caused resentment which could result in negative consequences for them such as increased waiting times. For example, nurses in Fry's (2012, p123) study referred to a *"positive bag sign"*

> *''…you have a positive bag sign, when I see the ambulance pull up and the bag's on the trolley. I just immediately think, right, you're in the waiting room''.*

They believed that these patients came with the expectation of being ill enough to bypass the waiting room and go straight into the ED or a hospital bed. In contrast, however, nurses felt if they were well enough to organise packing a bag they were unlikely to be acutely unwell and could therefore take their place in the queue with the rest, unless staff deemed otherwise. While from an outsider's perspective this may appear to be based on staffs' value judgment of what they deemed to be worthy, researchers found that their attitudes were driven by notions of safety, respect and equity. This view is supported in an earlier study (Sbaih 2002), which found that similar attitudes arose from staffs' desire to ensure safe and effective care for those who really needed it rather than any moral judgement of worth.

The literature revealed that staff viewed caring for certain service user groups particularly challenging. These groups included those at end of life (Bailey et al. 2011; Smith et al. 2009; Fernández-Sola 2017), those with mental health issues (Marynowski-Traczyk and Broadbent 2011; Wright et al. 2003; Innes et al. 2014) and older patients (Morphet et al. 2015; Taylor et al. 2015; Skar et al. 2015).

ED care of patients at end-of-life

Several studies examined the beliefs ED staff hold about treating palliative or end-of-life patients in the ED. In general, they found that while dealing with death from tragic or traumatic incidents was commonplace (Bailey et al. 2011; Kongsuwan 2016), treating patients with palliative or end-of-life needs appeared to be '*out of place'* (Bailey et al. 2011, p1375) and in conflict with the ED culture (Smith et al. 2009; Bailey et al. 2011). Two studies however highlighted that some of the staff found caring for end-of-life patients rewarding (Smith et al. 2009; Bailey et al. 2011). Bailey et al. (2011) undertook an ethnographic study over a twelve-month period in one large ED in England and described how once the decision for no further interventions was made medical staff withdrew as other patients became the priority. Some nursing staff felt torn between the care that they were able to give versus the care they would have liked to provide.

A number of factors were given as reasons why care in ED was not suitable for end-of-life patients. These included: heavy workload (Heaston et al. 2006; Beckstrand et al. 2008; Fernández-Sola 2017); other patients having a higher priority (Smith et al. 2009, Grudzen et al. 2012); a lack of time to spend with these patients (Beckstrand et al. 2008; Kongsuwan 2016; Wright et al. 2017); inadequate patient-staff relationships (Smith et al. 2009; Fernández -Sola 2017; Wright et al. 2017); staff not fully understanding or having training in the needs of palliative care patients (Smith et al. 2009; Grudzen et al. 2012; Wright et al. 2017); environmental factors such as lack of privacy (Smith et al. 2009; Grudzen et al. 2012; Fernández-Sola 2017); frequent interruptions (Grudzen et al. 2012); and being cared for beside other patients who were drunk or aggressive (Smith et al. 2009). Two studies identified fear of litigation which led to staff treating patients aggressively and providing life-prolonging measures when they felt that they may not have been in the patient's best interest (Grudzen et al. 2012) or indeed what the patient had stipulated in their advanced

directives (Smith et al. 2009). Smith et al. (2009) undertook a grounded theory study using three focus groups of ED providers to examine their perspectives on improving palliative care in the ED. They found that often advanced directives were so vague and ambiguous that staff did not have the confidence to follow them when challenged by family members and so they resorted to initiating life-saving measures. In addition, Grudzen et al. (2012) also cited a reimbursement system that favoured procedures over conversations as an obstacle. An earlier USA study, however, found this to be a very insignificant factor in determining the level of intervention undertaken for this patient group (Heaston et al. 2006).

ED care of patients with mental health issues

A number of studies found that there was a basic tension between the nature of ED work and the clinical needs of patients with serious mental health problems (Wright et al. 2003; Marynowski-Traczyk and Broadbent 2011; Innes et al. 2014). Wright et al. (2003) and McAllister et al. (2002) found that there were generally negative attitudes towards this patient group from ED staff. There was a strong assumption that psychosocial care was the primary responsibility of the mental health team, rather than the ED staff. This is meaningful as Wright et al. (2003) found that staff who believed that the ED was an appropriate place to provide this care, were likelier to report more positive attitudes towards these patients. Marynowski-Traczyk and Broadbent (2011) found that the concept of recovery in mental health did not necessarily mean cure or even a return to pre-illness state which was diametrically opposed to the expectations of ED staff. They struggled to understand this and the fact that these *'revolving door patients'* (p176) would return repeatedly with the same complaints was a source of frustration for them. Furthermore, ED staff tended to use the traditional biomedical model of care, aimed at recovering patients to full health (Marynowski-Traczyk and Broadbent 2011; Kongsuwan 2016), which was not

realisable for this patient group. The high-stimulus ED environment with its noise, time pressures, lengthy waiting times and lack of after hours on-call mental health services was not conducive to caring for these patients (Marynowski-Traczyk and Broadbent 2011, Innes et al. 2014). McAllister et al. (2002), Marynowski-Traczyk and Broadbent (2011) and Innes (2014) found that ED staff reported feeling poorly equipped and educated to deal with patients with mental health problems. Significantly, McAllister et al. (2002) found that where staff perceived themselves to be skilled in addressing the needs of these patients they were more likely to feel it was worthwhile working with them and were less likely to display negative attitudes.

ED care of older patients

Despite the fact that the number of older patients attending EDs is higher than any other age group (Parke et al. 2013), a number of studies highlighted how ED care did not address their specific needs and they were considered *'out of sync'* with the culture there (Taylor 2015, p187). More time was needed to care for these patients due to their complex needs which ED staff found difficult to accommodate (Morphet et al. 2015; Skar et al. 2015; Taylor et al. 2015). Older patients tended to have increased incidences of physical disabilities, such as visual impairment, deafness, impaired cognition (Bridges 2008), and required more time when communicating and giving information (Kelley et al. 2001; Morphet et al. 2015). Despite the growing concern around the increasing incidence of dementia in this age group, Parke et al. (2013) found that it was not a consideration for staff when assessing acuity, and patients with dementia were often under-triaged due to their inability to explain their symptoms. This had implications for the length of their wait in ED, which often exacerbated their confusion and distress. The ED physical environment was difficult for older patients. The department was noisy and busy (Morphet 2015), staff lacked time (Gallagher et al. 2014), there was a lack of privacy for examination, toileting and

personal care (Bridges 2008; Kelley et al. 2011) and the need to lie on stretchers caused physical discomfort and pain (Bridges 2008). Taylor et al. (2015) found that older patients' need for a slower pace conflicted with ED staffs' pressure to move quickly between patients and tasks. ED nurses communicated their need to work quickly and efficiently under pressure (Taylor et al. 2015), and Gallagher et al. (2014) found that staff were frustrated with relatives who did not seem to understand their need to prioritise other patients who were acutely ill over those who required fundamental nursing care.

2.3.3 Managing the patient journey through ED

The literature revealed that nursing staff had management responsibility within EDs, however, they appeared to have very little control over their environment. A number of studies revealed the emphasis was on getting the patient through the department as quickly as possible (Muntlin et al. 2010; Nugus et al. 2014; Taylor et al. 2015) however processes both within and outside the ED impacted on their ability to do this. ED staff were at the mercy of other departments to allow them to transfer patients for admission or treatment (Bergman 2012; Kihlgren et al. 2005; Muntlin et al. 2010) yet they were pressurised to not breach time targets for patients, which were enforced by a system of surveillance and management (Sanders et al. 2011; Hoyle and Grant 2015). Nurses in one Australian study described their department as *'completely constipated'*, '*gridlocked'* and *'bottlenecked'* (Nugus et al. 2014, p5), which led to overcrowding, low staff satisfaction, decreased compliance with clinical guidelines, decision-making errors, an increase in the quantity of adverse events, and increased waiting times, causing patients to leave the department without being seen (Nugus et al. 2014). The imbalance between inflow and outflow meant additional tests and treatment needed to be performed in the ED and nurses needed to continue caring for waiting patients as well as continuing to assess new patients (Elmqvist et al. 2012;

Kihlgren et al. 2005). This further increased workload and responsibility and led to fragmented care (Andersson et al. 2012; Nugus et al. 2014; Sbaih 2002). In addition, Coughlan and Corry (2007) found that the equipment, structure and design of EDs were constructed to facilitate transiting patients and were not suitable for patients who had to wait for lengthy periods of time in that environment, all of which negatively impacted on the quality of care delivered. The fact that these studies were undertaken in Sweden, USA, UK, Australia and Ireland indicate that these are widespread issues within EDs.

2.3.4 Nurse-doctor relationships

A further paradox reported in the literature was that while nurses had managerial responsibility of the ED they did not have managerial control over medical staff working there. Two Swedish phenomenological studies highlighted how nurses deferred to doctors. Elmqvist et al. (2012) found it was a source of stress to nurses when doctors did not come to see patients waiting in the ED. They were forced into trying to appease patients and give explanations for indeterminate waiting times over which they had no control. Nyström et al. (2003a) identified how nurses interceded with patients in an attempt to keep doctors happy indicating a deferential relationship and an awareness of their status in relation to medical staff. Nyström et al. (2003a) found that some doctors became irritated when nurses failed to direct inappropriate patients to other forms of medical care. One nurse, in order to avoid outbursts, reportedly questioned herself *"do I dare let this patient in to see this doctor?"* (p765).

Sanders et al. (2011) presented a narrative case study on one nurse's experience of managing a busy ED in the UK, which highlighted the power status differential between nurses and doctors. While she struggled to manage the system that was governed by externally enforced service targets, one doctor responded angrily to

management's insistence of moving an ill patient on in the system in order to not breach a time target. The doctor's apparent disregard for a system which seemed to dominate and direct the nurse's role highlighted the different autonomy each felt in the workplace. There were further examples of this differing status in studies from Sweden, Canada and Australia showing how patients and staff treated doctors and nurses differently. Doctors appeared to be buffered from negative interactions with patients due to their status, while nurses endured the main criticism and complaints (Khokher et al. 2009; Nyström 2002). Pich et al. (2011) interviewed six Australian triage nurses regarding their experiences of patient-related workplace violence. They found that patients treated nurses differently to doctors and indeed often stopped their abusive behaviour when a doctor came into their presence.

2.3.5 Patients and relatives experience of care

Several studies examined patient and relatives experience in ED and found what was important to them included: appropriate treatment, accurate diagnosis, and timely care (Hunold et al. 2016); positive staff–patient interactions (Kihlgren et al. 2004; Nydén et al. 2003; Nystrom et al. 2003a); communication and information received (Limbourn and Celenza 2011; Morphet et al. 2015; Botes and Langley 2016); staff competence (Cluckey et al. 2009; Nydén et al. 2003; Hunold et al. 2016); and having a family presence (Bridges 2008; Morphet et al. 2015; Botes and Langley 2016). Patients who were accompanied in the ED valued the support from their friends and family, particularly when they depended on them for company when they were left alone often for long periods (Nystrom et al. 2003b; Totten et al. 2014). Indeed, Duran et al. (2007) found that patients felt it was their right to have relatives present, while Fry et al. (2014) found that ED nurses appreciated their presence when they considered them to be helpful and informative, but a source of frustration if they cost them time. Relatives served a function as carers or an advocate to speak to staff or

ask questions on patient's behalf (Nystrom et al. 2003b; Frank et al. 2009). In addition, they were used to perform such functions as monitoring the patients' medical conditions (Nystrom et al. 2003b; Gallagher et al. 2014), maintaining privacy (Coughlan and Corry 2007) and helping out with communication difficulties (Bridges 2008; Fry et al. 2014; Morphet et al. 2015). Cluckey et al.'s (2009) study in USA found relatives were sensitive to nonverbal behaviours of nurses such as tone of voice, pace and force of actions being undertaken. They valued nurses taking care of the patient and engaging in active listening and being present and fully engaged with them in the moment.

The literature painted a generally negative picture in relation to how patients and relatives experienced care in EDs. One Swedish study (Nyström et al. 2003a) found dissatisfaction with care, a feeling of not being considered as an individual, and a lack of caring as predominant features of patients' experience. Three studies, two from USA (Musso et al. 2015; Samuels-Kalow 2016) and one from Canada (Kelley et al. 2011), found that a large proportion of patients were discharged without adequate understanding of their diagnosis, treatment or discharge information. Others described patients feeling abandoned, exposed, vulnerable, ashamed, ignored, insecure, frightened, forgotten or unwelcome (Elmqvist et al. 2011; Möller et al. 2010; Parke et al. 2013). Kelley et al. (2011) and Parke et al. (2013) found a lack of attention was paid to basic needs such as food and drink. Some relatives experienced feeling *"like a spectator"* (Morphet et al., 2015, p3650) or *"ostracised"* (Palonen et al. 2016, p 3337). Factors attributing to these care experiences included the quality of staff-patient interaction, (Coughlan and Corry 2007; Morphet et al. 2015; Palonen et al. 2016) fragmented care (Bergman 2012; Khokher et al. 2009) and lack of privacy (Coughlan and Corry 2007; Karro et al. 2005; Kelley et al. 2011). An Australian study (Karro et al. 2005) examining perceived privacy breaches sampled 1169 patients who attended one ED department over a two-week period. From the 235 who responded

to their questionnaire, over two thirds of the patients reported either a definite (n = 78, 33%) or suspected breach (n = 81, 35%) in their privacy. Almost half (n = 105, 45%) of the patients reported overhearing others' conversations while fifteen per cent of patients (n = 36) felt that their own information had been overheard by others. Curtained cubicles and lengthy waiting times were the main contributing factors to this. In a small number of cases this led patients to withhold information from staff or refuse part of their physical examination. Although the response rate in this study was just over twenty percent, the authors state that the demographics of the respondents were representative of the ED population in general. The fact that it was carried out in just one ED, however, limits the generalisability to other ED environments. Two studies (Kelley et al. 2011; Stiffler and Wilber 2015) found that patients who were treated in corridors due to overcrowding were significantly less satisfied with their overall ED experience than those who were treated within the department. Coughlan and Corry (2007) found that the treatment received in one Irish ED caused some patients such distress that they were in terror of returning there. Some likened it to what would be expected in a low-income country or following a major disaster.

There was some evidence, however, of patients' awareness and acceptance that the ED culture placed significance on physical rather than affective caring. They appeared to be prepared to tolerate this lack of psychological care in trade-off for having the physical component of their care treated. Two Swedish studies referred to patients feeling a reassurance that they were in the ED and had a sense of security in that they would be treated there (Nydén et al. 2003; Elmqvist et al. 2012). Nydén et al. (2003) found that safety needs dominated, with patients feeling fairly safe just being in hospital.

Not all service users were totally dissatisfied with their care in EDs. Several studies found examples of patients or relatives who were mostly satisfied (Cluckey et al. 2009;

Soleimanpour et al. 2011; McCarthy et al. 2013). It is worth noting, however, that Cluckey et al.'s (2009) study, which examined the perceptions of family members of trauma patients, was undertaken in USA in a Magnet status hospital which had private rooms and an environment that emphasised treating patients and family members with dignity and respect, and encouraged shared decision-making. Therefore, the findings from Cluckey et al's study (2009) are not generalisable to other EDs.

2.3.6 A stressful environment

Staff found working in the ED a source of stress. Studies conducted in USA, Canada, UK and Belgium supported this indicating that the problem appeared to be an international one. Staff reported suffering from a range of symptoms which included sleep disturbances, having an anxious or depressed mood (Stathopoulou et al. 2011), having intrusive thoughts about patients, avoidance of patients, and being easily annoyed (Dominguez-Gomez and Rutledge 2009). Various causes were found and these were mainly relating to the care environment such as organisational factors, the interpersonal environment and patient care (Adeb-Saeedi 2002; Sawatzky and Enns 2012; Johansen 2014). Adeb-Saeedi (2002) carried out a study to identify sources of stress amongst ED nurses in Iran. The highest scoring stress items were dealing with patients' pain and suffering, family presence in the ED, relatives' reactions, heavy workloads, time pressure and death and dying. However, it is a cultural norm in Iran that relatives accompany patients to hospital which is not common practice elsewhere (Adeb-Saeedi 2002) therefore, associating the presence of relatives as a source of stress cannot be generalised.

Several aspects of ED work have been cited as key determinants in staffs' intention to leave their job such as a lack of engagement and high burnout (Sawatzky and Enns 2012), interpersonal conflict (Laposa et al. 2003), and lack of control due to the sheer

volume of patients (Bergman 2012). A longitudinal study in Belgium (Adriaenssens 2011) found a high turnover of ED staff with 20% of nurses having left their workplace within an 18-month timeframe.

Aggression and violence was a well-documented outcome for staff in the literature and a key source of stress within the ED environment. Studies were reported from a range of countries including UK, Ireland, Australia, USA and Turkey. The terms violence and aggression were used interchangeably in the literature, however it would appear that the most common form of violence and aggression experienced was verbal (Crilly et al. 2003; Gilchrist et al. 2010; Pinar and Ucmak 2010). Types of violence and aggression experienced included being sworn at, yelled at, threatened and intimidated, slapped, kicked or hit (Crilly et al. 2003; Pich et al. 2011). Ferns (2005) suggested that while ED nurses do experience excessive verbal abuse, physical assaults remain infrequent with the level or severity at a relatively low level in the UK. Gilchrist et al's (2010) retrospective survey of Australian ED staffs' experiences found that almost half of the participants reported experiencing verbal abuse daily from service users. Approximately half of them reported experiencing threats and physical intimidation at least monthly, and two thirds had been physically assaulted during their time working in the ED. Hislop and Melby (2003) and Pich et al (2011) reported in their studies that staff considered violence as imminent in their day-to-day work in ED. Indeed, one nurse stated that being assaulted was like an initiation into the world of ED nursing (Hilslop and Melby, 2003). However, the actual frequency of violent episodes may differ greatly from staffs' perceptions of them, as this nurse had in fact waited for two years for the assault to occur.

Nurses appeared to be the main targets. While the main perpetrators were usually patients (Adeb-Saeedi 2002; Hyland et al. 2016) and their relatives (Pinar and Ucmak 2011) one Korean study (Yoon and Sok 2016) found that nurses experienced a high

level of verbal violence from work colleagues and in particular from doctors. Negative consequences experienced included feelings of embarrassment, powerlessness, frustration, isolation and vulnerability (Hislop and Melby 2003; Pich et al. 2011), anger, anxiety, fear, and decreased job satisfaction, (Kansagra et al. 2008, Yoon and Sok 2016) and feeling degraded (Pich et al. 2011). Two studies highlighted nurses' bewilderment at being targeted by patients and relatives when they were there in a caring capacity. In a UK phenomenological study by Hislop and Melby (2003) one nurse expressed a feeling as if the whole waiting room hated them and stated: *"it just wrecks my spirit"* (p 8). Similarly, Pich et al. (2011, p14) described nurses voicing a lack of empathy towards so-called ungrateful patients who they were trying to help saying it felt like *"being kicked in the teeth"*.

Multiple causal factors have been suggested. Patient factors included alcohol and substance misuse (Gilchrist et al. 2011; Pich et al. 2011; Yoon and Sok 2016), mental illness (Crilly et al. 2004; Gilchrist et al. 2011; Hyland et al. 2016) and a lack of understanding of the system (Gilchrist et al. 2011). Environmental factors were also cited such as lengthy waiting times (Gilchrist et al. 2011; Kansagra et al. 2008; Lau et al. 2012), inability to access desired services, (Crilly et al. 2004; Gilchrist et al. 2011), limited space, overcrowding and lack of information (Angland et al. 2014). Several authors identified that in some cases how staff engaged with patients could also be a significant contributory factor. Angland et al. (2014) found that at times staff may exacerbate difficult situations by projecting themselves negatively. This was supported by two Australian studies which found that behaviours staff displayed included being overtly authoritative, being judgemental and confrontational (Lau et al. 2012), and being rude and condescending to patients (Pich et al. 2011).

In a Turkish study conducted by Pinar and Ucmak (2011), they found that staff felt unsupported by management in relation to patient violence and aggression and instead sought support from colleagues. The authors acknowledge that cultural

standings may have had an influence, as violence is considered private in this culture, with Turkish women being particularly vulnerable due to their position in society. This however is not borne out in the literature as UK (Hislop and Melby 2003), Singapore (Tan et al. 2015), USA (Wolf et al. 2014) and Australian studies (Gilchrist et al. 2011; Pich et al. 2011) also report findings that staff felt unsupported by management and emphasised the value of informal support from their colleagues. Wolf et al. (2014, p308) found there was a culture of acceptance around violence in ED being part of the job, and reported how one nurse was told by a colleague that if she *'couldn't handle it'*, she should *'get out'* of the job. Similarly, Pich et al. (2011) found that staff felt that there was an expectation that they should *'be able to hack it'* (p16).

2.4 Person-centredness in Emergency Departments

Analysis of the literature would suggest that whilst components of person-centredness have emerged from the empirical evidence, no papers were identified that discussed person-centredness as a concept that relates to care delivery within ED. Although the vocabulary within the studies was not that of person-centredness as defined by McCormack and McCance (2010, 2017), the themes presented could be clearly mapped to the aspects within the PCPF as illustrated in Figure 2.3.

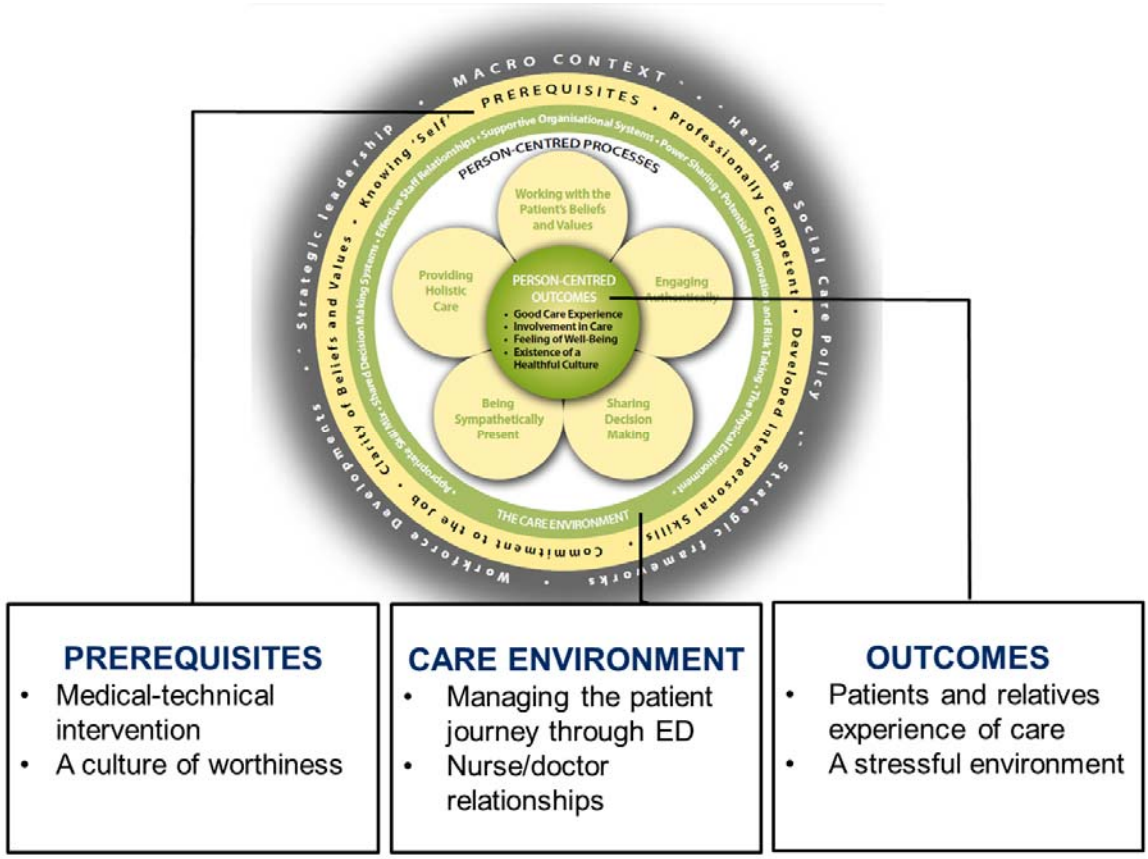

Figure 2.3: Mapping of the literature themes to the Person-Centred Framework

Prerequisites as described by McCormack and McCance (2010) focus on the attributes of staff and include being professionally competent; having developed interpersonal skills; commitment to the job; being able to demonstrate clarity of beliefs and values; and knowing self. Much of the ED literature related to the prerequisites, and in particular that of having clarity of beliefs and values which in turn determined how staff viewed their work, what they valued and how they related to the various patient groups who presented in the department. Themes emerging from the literature that related to these include the focus on 'medical-technical interventions' and the presence of a 'culture of worthiness'. Staff valued medical tasks and interventions over caring and this determined what they felt the nature of ED work should be and what types of patients were considered to be worthy ED presentations. These characteristics are deeply embedded within the culture and may be difficult for staff to

recognise and acknowledge. The evidence from the literature, however, would suggest that ED staff need to reappraise their values, considering the attributes of staff form the foundation for achieving person-centred care (McCormack and McCance 2010).

The care environment as described by McCormack and McCance (2010) focuses on the context in which care is delivered and includes: appropriate skill mix; systems that facilitate shared decision making; effective staff relationships; supportive organisational systems; power sharing; and the potential for innovation and risk taking. The themes of 'managing the patient journey through ED' and 'nurse/doctor relationships' related to aspects of supportive organisational systems, effective staff relationships and power sharing within the framework. Within this domain the responsibilities and pressures on ED nurses was apparent in the literature. It revealed how they struggled to manage patients' journeys through a system which was governed by processes outside their control, and medical staff over whom they had no authority. Inadequacies within the care environment need to be addressed if person-centred care is ever to be a reality in ED, considering the care environment has the greatest potential to limit or enhance the delivery of person-centred care McCormack and McCance (2010).

It was evident from the literature that the ED care environment impacted on how staff engaged in person-centred processes. Person-centred processes as described by McCormack and McCance (2010) focus on delivering care through a range of activities and include working with patient's beliefs and values; engagement; having sympathetic presence; sharing decision making; and providing for physical needs. Various aspects of the framework, in particular from the prerequisites and care environment domains were seen to impact on how care was delivered. For example, a concentration on tasks and interventions and the need to maintain patient

throughput meant that care delivered was fragmented and staff failed to engage fully with patients. While this was not identified as a major theme within the papers reviewed it was an apparent consequence that was threaded throughout the literature. It is clear from the literature that the demands of ED work impacted on staffs' ability to deliver person-centred processes however McCormack and McCance (2010) contend that a shift in attitudes and behaviours could still enable this to be achieved.

McCormack and McCance (2010) assert that staff must possess certain attributes in order to manage the care environment and enable them to deliver effective care processes to achieve effective person-centred outcomes for patients and staff. Outcomes are the results of effective person-centred practice and include: satisfaction with care; involvement in care; feeling of well-being; and creating a therapeutic environment. A large proportion of the literature focused on negative outcomes for ED staff and service users. Staff experienced a stressful environment due to systems beyond their control, staff relationships and violence and aggression, which had negative psychological consequences for them including burnout and a desire to leave ED. Service users' experiences of care in turn was greatly impacted on by how staff interacted with them and the environment in which they were cared for, and often resulted in care that was far from what they would have wished for themselves or their relatives. Various components within the prerequisites, care environment and care processes could be seen to contribute to these outcomes, although this was implicit from the literature reviewed and not an explicit objective of the studies undertaken, indicating that there is value in exploring person-centredness as a concept within an ED context.

2.5 Summary

This chapter has reviewed the literature in relation to person-centredness both generally and in relation to ED. The first section focused on the existing literature on person-centredness in general and revealed that many similar terms are used interchangeably, although they do not necessarily have the same meaning. McCormack and McCance's (2010, 2017) definition of person-centredness offers a comprehensive view of the concept. In it they stress the importance of the care environment, carers, families and colleagues as significant considerations within person-centredness. These aspects are missing from many of the other definitions. For these reasons it was chosen as the definition of person-centredness for this study, and its related theoretical framework has been used to underpin the study.

The second section of this chapter addressed the review of the existing literature on person-centredness in EDs. It revealed that person-centred care is comprised of several distinct components which interact with each other and ultimately determine the care experience for staff and patients. The findings from this analysis of the international literature confirm that there are powerful relationships between these various components that are considered crucial to the development of person-centred practice that have not been explored within ED to date. Associations and links originating from the studies have been limited to those found between or within one or two of these components described by McCormack and McCance (2010, 2017). Consideration as to how all the individual components that comprise person-centredness interact with, and impact on each other in the delivery of care within the ED setting, has not been previously explored within the current literature. This information is vital if the delivery of person-centred care within the ED context is to be realised, and therefore this study has been designed to address this gap.

CHAPTER 3: PHILOSPOHICAL UNDERPINNINGS OF THE STUDY

This chapter aims to examine the philosophical underpinnings of the pragmatic paradigm as a suitable paradigm within which to undertake this mixed methods study. The first section discusses the main underpinning principles of pragmatism and their application in research. In the second section the researcher's own background, positioning and philosophical beliefs are made explicit in order to highlight potential biases and influences which may impact on the research process in this study.

3.1 The pragmatic paradigm for mixed methods research

Pragmatism uses diverse approaches and multiple methods of data collection to inform a study, and it is typically associated with mixed methods research (Johnson and Onwuegbuzie 2004; Creswell and Plano Clarke 2007; Teddlie and Tashakkori 2009). Interest in pragmatism had waned but it resurged in the 1980's due to the work of Rorty (McDermid 2017). It first emerged in the United States in the 19th century in the wake of the American Civil War (Snarey and Olson 2003). William James is considered to be the founding father although the work of his colleague Charles Sanders Peirce and his student John Dewey also featured largely at that time (McDermid 2017). Each brought a slightly different perspective to pragmatism and while there were some differences between the views of these philosophers the following quote by Louis Menand summarises the underpinning commonalities in these men's thinking:

> *"…all believed that ideas are not 'out there' waiting to be discovered, but are tools – like forks and knives and microchips – that people devise to cope with the world in which they find themselves. They believed that ideas are produced not by individuals, but by groups of individuals – that ideas are social. They believed that ideas do not develop according to*

> *some inner logic of their own, but are entirely dependent, like germs, on their human carriers and the environment. And they believed that since ideas are provisional responses to particular and unreproducible circumstances, their survival depends not on their immutability but on their adaptability" (pp. xi–xii).* (Menand, cited in Snarey and Olson, 2003, p92)

Johnson and Onwuegbuzie (2004) integrated the main tenets of the classical pragmatists' work to develop the General Characteristics of Pragmatism. Johnson and Gray (2010, p88) summarised the main principles of these characteristics as presented in Table 3.1 each of which will be discussed in greater detail below.

Table 3.1: Main principles of the General Characteristics of Pragmatism (Johnson and Gray 2010)

a) Rejects dichotomous either/or thinking.
b) Agrees with Dewey that knowledge comes from person-environment interaction, dissolving subject/object dualism.
c) Views knowledge as both constructed and resulting from empirical discovery.
d) Takes the ontological position of pluralism (i.e. reality is complex and multiple).
e) Takes the epistemological position that there are multiple routes to knowledge and that researchers should make "warranted assertions" rather than claims of unvarying Truth.
f) Views theories instrumentally (i.e. theories are not viewed as fully True or False, but as more or less useful for predicting, explaining and influencing desired change).
g) Incorporates values directly into inquiry and endorses equality, freedom and democracy.

a) Rejects dichotomous either/or thinking

Many researchers feel that there is incommensurability between the philosophical perspectives of the positivist/post-positivist and interpretivist paradigms, and that an acceptance of one standpoint means a rejection of the other (Kuhn 1962; Sale et al.

2002). Researchers within the pragmatist paradigm reject a forced choice between these camps and it was from '*the ashes of the so-called paradigm wars'* during the 1970s and 1980s that the pragmatic paradigm arose (Feilzer 2010; Polit and Beck 2012, p604). Dewey, a classical pragmatist, stated that rather than solving the old traditional philosophical problems, we in fact need to *"get over them"* (Morgan 2014, p1049). Pragmatism is seen by many as the middle ground on a continuum between post-positivism and interpretivism (Creswell 2010), and pragmatists adopt an antidualistic approach which Johnson and Gray (2010) term as synechism. According to De Lisle (2011), pragmatism is the foundation for rejecting the incommensurability thesis and is the scaffolding that supports a multi-perspective flexible research philosophy. Guba and Lincoln (2005) agreed that there was some overlap between paradigms and conceded that a degree of permeability was acceptable provided it did not involve the key ontological assumptions. Johnson and Onwuegbuzie (2004) highlight that there are commonalities among all paradigms, for example they use empirical observations to address research questions, they construct explanatory arguments from their data and incorporate rigour into their inquiries in order to minimize bias and invalidity, and all attempt to provide justified assertions about the phenomena being researched. Johnson and Gray (2010, p88) propose the use of the term 'dialectical pragmatism' where researchers carefully consider the dialogue with quantitative and qualitative perspectives at every stage of the study and learn from the natural tensions that exist between them. They state that from this, an approach is produced that synthesises insights from both perspectives. Morgan (2007) draws on the work of Patton (2002) in suggesting how pragmatism can bridge the divide between the conflicting methodological issues, which divide the main stances of qualitative and quantitative research. These are shown in Table 3.2 and are expanded on in the subsequent sections.

Table 3.2: A pragmatic alternative to the key issues in research methodology (Morgan 2007)

	Qualitative Approach	Quantitative Approach	Pragmatic Approach
Connection of theory and data	Induction	Deduction	Abduction
Relationship to research process	Subjectivity	Objectivity	Intersubjectivity
Inference from data	Context	Generality	Transferability

b) Knowledge comes from person-environment interaction, dissolving subject/object dualism

Dewey rejected the subjective/objective dualistic epistemology believing that while each stance holds valid claims, neither give the full picture of how knowledge is attained (Field 2017). Dewey's theory of inquiry holds that we immediately experience the world around us, but this in itself has no significance until we respond and act upon it, thereby forming knowledge from experience (Biesta 2010). These experiences are shaped from infancy by society and are therefore inherently contextual, emotional, and social (Morgan 2014). Dewey proposed a naturalistic approach which considers that knowledge is not passively gained through observation; rather it is acquired through inquiry which is an active process that involves the individual interacting with the environment in the process of learning (Field 2017). Knowledge is formed from experience which is created through a cycle of learning through reflection and action. Dewey believed in a cyclic process where the origins of our beliefs develop from our previous actions, and the results of our actions originate from our beliefs (Morgan 2014).

For Dewey, inquiry or the pursuit of knowledge, is a specific kind of experience that is problem-solving and purposeful, where beliefs that are challenging are scrutinised and resolved through action (Morgan 2014). In this way knowledge grows through experimenting and manipulating in order to find the best outcome (McDermid 2017).

Summers (1994) clarified what this means in everyday terms using Pirsig's practical example of a screw that is stuck on a motorcycle. According to Pirsig a positivist/ post-positivist researcher would examine any number of facts about the screw, in a disengaged manner, and then reason objectively from the facts observed. Pragmatists reject this passivity of observation, and would believe that objective observation alone would not result in the necessary knowledge of how to release the screw. Instead the pragmatic researcher would use the problem of the stuck screw as the basis for inquiry, and actively examine the screw in the light of seeking the knowledge to resolve the problem. Summers (1994) states that in this way Pirsig follows the Deweyan principle of inquiry by actively looking for the facts which require solving, which can only be achieved through the activity of knowing which comes from prior experience. Figure 3.1 illustrates this Deweyan process of inquiry as depicted in Morgan (2014).

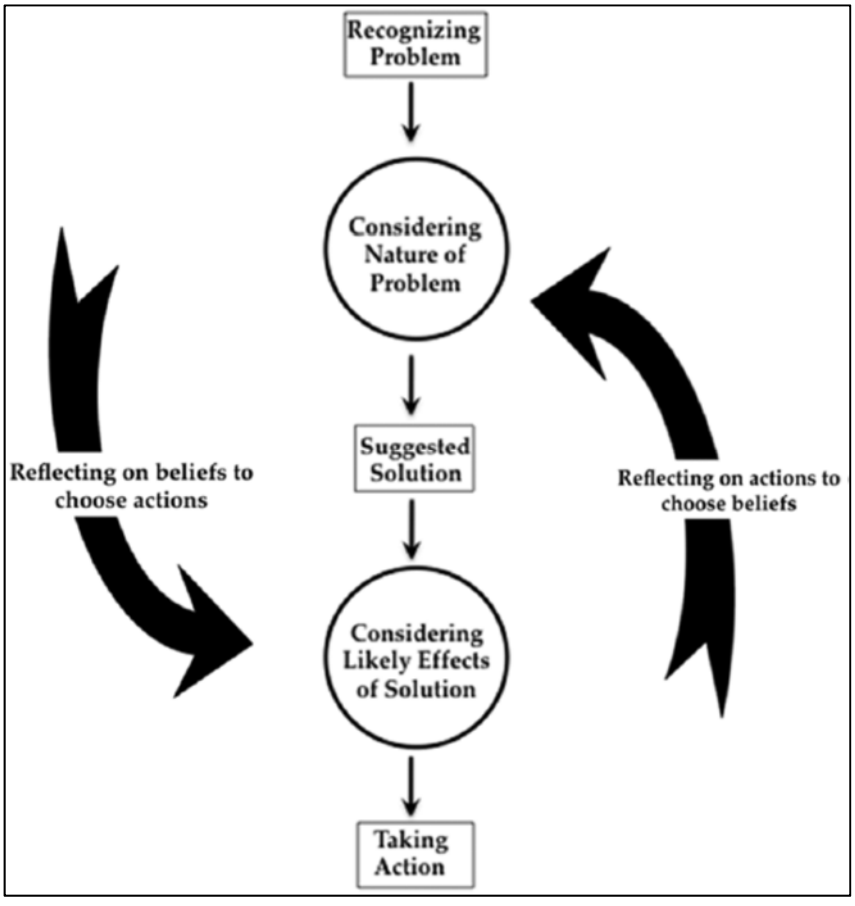

Figure 3.1: Dewey's process of inquiry (Morgan 2014)

c) Views knowledge as both constructed and resulting from empirical discovery

Epistemology is concerned with how the human mind can attain knowledge of a world that is outside of itself (Biesta 2010). The mind-world scheme considers that there are two options of how knowledge is acquired. The first of these is the objective dualistic approach adopted by positivists/post-positivists where they consider that reality consists of two separate entities of mind and matter, and knowledge is concerned with how the mind can get in touch with the world (Biesta 2010). They subscribe to the spectator theory of knowledge (Summers 1994), believing that the world exists separately from their understanding of it. Researchers adopting this perspective eliminate biases and remain emotionally detached and uninvolved with the researched, which is considered a totally independent entity (Johnson and Onwuegbuzie 2004; Shah and Al-Bargi 2013). Meaning is exclusively found in objects rather than the researcher's consciousness of those objects (Shah and Al-Bargi 2013), and objectivists impartially discover absolute knowledge about objective realities (Scotland 2012). The following example illustrates the positivist/post-positivist view where phenomena have an independent existence to be discovered.

> *"A tree in the forest is a tree, regardless of whether anyone is aware of its existence or not. As an object of that kind, it carries the intrinsic meaning of treeness. When human beings recognize it as a tree, they are simply discovering a meaning that has been lying in wait for them all along."* (Crotty 1998).

The second option considered by the mind-world scheme is that of the subjective approach adopted by interpretivists where knowledge is created by activities of the human mind (Biesta 2010). The interpretive paradigm emerged in the 20th century to address the gap that positivist and post-positivist research did not fulfil of uncovering the understanding and interpretation of human and social reality, by exploring individuals' perceptions, sharing their meanings and developing insights about their

experiences (Bryman 2008; Watson et al. 2008). The interpretivist epistemology is subjectivism which purports that the world does not exist independently of our knowledge of it (Scotland 2012). Meaning is not discovered, it is constructed though the interaction and participation of the individual with the phenomena (Scotland 2012), and people make sense of their world based on their own historical and social perspectives (Creswell 2013). People will construct their own meaning in different ways therefore knowledge is culturally derived and historically situated (Scotland 2012), and is time, context and value-bound (Johnson and Onwuegbuzie 2004). Crotty (1998) uses the illustration of the trees again to demonstrate this from an interpretivist's viewpoint.

> *"We need to remind ourselves here that it is human beings who have constructed it as a tree, given it the name, and attributed to it the associations we make with trees."*

According to Morgan (2014) both stances have limitations. Positivists' and post-positivists' experiences of their objective world are by necessity constrained by the nature of that world. Meanwhile interpretivists' understanding of the world is essentially limited to the interpretations of their subjective experiences of it. Pragmatism challenges this either/or stance of the mind-world scheme (Biesta 2010), and instead adopts the epistemological stance of intersubjectivity (Morgan 2007). Through this knowledge is considered as both constructed and resulting from empirical discovery, and the alleged hierarchies between different knowledges are dismissed. Pragmatists believe that no knowledge can claim to provide a deeper, truer account of the world and different knowledges come from the different ways in which individuals engage with the world and are the consequences of different actions (Biesta 2010). Researchers work back and forward between objective and subjective frames of reference to achieve mutual understanding and shared meanings, which is essential in a pragmatic approach (Morgan 2007).

d) Takes the ontological position of pluralism (i.e. reality is complex and multiple)

Paradigms, or worldviews, contain a basic set of ontological, epistemological, methodological and axiological assumptions concerning how we view the world, and therefore they guide how we conduct and interpret our research or inquiries (Guba and Lincoln 2005; Creswell and Plano Clarke 2007). The ontological stance adopted by each paradigm dictates the extent, and type, of knowledge that can be gained from it (Morgan 2014). For pragmatists there is no ontological separation (Summers 1994). Ontologically they adopt the position of pluralism (Johnson and Gray 2010). They believe that there is a single world out there, of which each individual will have their own interpretation (Morgan 2007). This approach to the nature of reality combines those of the positivist, post-positivist and interpretive stances. For pragmatists this bringing together of seemingly incommensurable paradigms (Kuhn 1962; Sale et al. 2002) is possible because of the level at which they view paradigms. Morgan (2007) refers to the earlier work of Kuhn and discusses paradigms on four levels of increasing specificity: a worldview, an epistemological stance, shared beliefs in a research field, and model examples. He favours the notion of a paradigm as shared beliefs in a research field, where he considers paradigms as *'frameworks for thinking about research design, measurement, analysis and personal involvement'* (p65). Johnson and Gray (2010) also refer to paradigms at different levels; methodological paradigms and philosophical paradigms. In their writings they discuss the existence of quantitative, qualitative and mixed methods *methodological* paradigms, and advocate the use of the pragmatic *philosophical* paradigm for mixed methods studies. Morgan (2007) however states that while some researchers consider paradigms at different levels, the commonality is that all are nested within each other and are comprised of shared belief systems that influence the kinds of knowledge researchers seek and how they interpret the evidence they collect. Morgan (2007) believes that considering paradigms at a methodological rather than philosophical level makes it much easier

to combine qualitative and quantitative research methods. The ability to combine both within one study raises queries about the degree to which philosophical assumptions actually guide research, and highlights a disconnect between these and the practical aspects of the research process (Morgan 2007). A pragmatic approach treats issues related to the research itself as the principal driver and gives equal attention to both its epistemology and its research design and methods (Morgan 2007). Pragmatic researchers have no set methodological requirements and can select any method based on its appropriateness to achieve the research aims (Greene and Hall 2010; Houghton 2012). This however does not constitute an endorsement of the overly simplistic view of pragmatism as *'what works'*, as pragmatist philosophy goes well beyond this (Morgan 2014). Within other paradigms there is a hierarchal order of ontological and epistemological concerns over methods, and critics of pragmatism contend that they fail to pay adequate attention to their epistemology and ontology (Ormerod 2006; Lincoln 2010). The reality is, however, that while they do not ignore the relevance of ontology and epistemology, pragmatists reject their top-down privileging, and believe that it is the methodology that is the connection between epistemology and the actual research design and methods used to generate that knowledge (Morgan 2007, 2014). Rather than assigning a priori ontological and epistemological assumptions to research, a pragmatist would consider how the different modes of inquiry could best achieve the aim and objectives of the study. They would focus on what the purpose was for acquiring that knowledge, and what difference it would make to acquire one type of knowledge rather than another, when deciding which approach to adopt (Morgan 2014).

e) Takes the epistemological position that there are multiple routes to knowledge and that researchers should make "warranted assertions" rather than claims of unvarying Truth

Pragmatists believe that there are multiple routes to knowledge and the pragmatic researcher moves between the various frames of reference to reach an overall understanding (Johnson and Gray 2010). In this way they emphasise *'shared meanings and joint action'* (Morgan 2007, p67), where both qualitative and quantitative approaches are used to balance the advantages and disadvantages of each other. Through this, even when dissonance exists between both datasets the integration of these achieves shared meanings (Shannon-Baker 2016). The early pragmatic stance on Truth was that an idea was true if it corresponded to reality, and was successful in leading to the resolution of a problematic situation (Field 2017). Because of the ambiguity and confusion that surrounded issues of knowledge and truth pragmatists later abandoned the term truth in favour of the expression 'warranted assertions' (Johnson and Gray 2010; Field 2017). This is because these assertions are only warranted because of our actions and their results in that particular situation, rather than true for all time and future situations (Biesta 2010). They contest the idea that Truth can be determined once and for all (Pansiri 2005). Pragmatists do not believe that knowledge is either specific and time and context-bound, or universal and generalisable. Instead they believe that the degree to which knowledge from one time and setting can be transferred to another time and setting, should be assessed from the specific results and general implications of that study (Morgan 2007; Biesta 2010; Shannon-Baker 2016).

f) Views theories instrumentally (i.e. theories are not viewed as fully True or False, but as more or less useful for predicting, explaining and influencing desired change)

Pragmatic epistemology stands in contrast to the positivist/post-positivist and interpretivist views of knowledge creation. Positivists work deductively from theory to hypothesis in an attempt to either support or contradict that theory (Creswell and Plano-Clark 2007). Post-positivists concede that theories can never be proven as wholly true, they can only be tentatively accepted when all attempts to disprove them fail (Scotland 2012), and consequently researchers state that they do not prove a hypothesis, rather they fail to reject it (Creswell 2009). Pragmatism rejects positivism on the grounds that *"no theory can satisfy its demands"* of objectivity and falsify-ability (Powell 2001, p84). Equally pragmatism rejects the interpretivist stance of socially constructed, inductive theory since *"virtually any theory would satisfy them"* (Powell 2001, p84). Instead pragmatists view theories not as a means to find truth or reality, but as tools to facilitate humans to deal with the surrounding environment and facilitate problem-solving when the need arises. In this way pragmatists consider that theories become true when they are successful in achieving this end (Pansiri 2005). They believe that "*truth is what works"* (Pansiri 2005, p197). Morgan (2007) uses the term abductive reasoning to refer to how pragmatist researchers use both induction and deduction; observations are converted into theories which are then tested through action (Morgan 2007). Biesta (2010) gives the example of a person approaching a piece of paper with the expectation that they can write on it as this is what paper is used for. However, it is only when that person writes on the paper that it can be seen whether the inferred meaning is actually true. A common application of this in mixed methods research is the two-stage sequential approach where the findings from one stage are used as inputs for another stage thereby utilising both inductive (qualitative) and deductive (quantitative) approaches within the one inquiry (Morgan 2007).

g) Incorporates values directly into inquiry and endorses equality, freedom and democracy

The appropriateness of including axiology, or the role that values play in research (Creswell and Plano Clarke 2007; Greene and Hall 2010), at philosophical level has been queried. According to Morgan (2007), while the consideration of ethical issues and values in research is important, the inclusion of them at the level of debate about the nature of reality, or the possibility of objective truth is a poor fit. He concedes, however, that in pragmatism the link between ethics and epistemology is significant. He states that for the pragmatist

> *'…it is not the abstract pursuit of knowledge through "inquiry" that is central to a pragmatic approach, but rather the attempt to gain knowledge in the pursuit of desired ends'* (Morgan 2007).

This is supported by Pansiri (2005), who states that for pragmatists' values play an important role in conducting research and interpreting results, where the researcher accepts external reality and chooses explanations that best produce desired outcomes. This stance is in stark contrast to the positivist viewpoint who believe that knowledge is value-free, generalisable, and time and context free (Johnson and Onwuegbuzie 2004; Shah and Al-Bargi 2013). Post-positivists concede, however, that even on a practical basis the idea of fully objective and value-free research is a myth, and recognise that all observations are theory-laden and value-laden and scientists are inherently biased by their own experiences (Johnson and Gray 2010).

Ethical and moral issues are always significant in pragmatism and a pragmatic approach emphasises that these are a part of who we are and how we act (Morgan 2007). Morgan (2014) highlights how the experiences we bring to research, and the outcomes and understanding we gain from that research, are context bound, embodied and emotional, and social in nature (Morgan 2014). For the pragmatist

'inquiry will always be a moral, political and value-laden enterprise' Denzin (2010, pp424-425). Morgan (2014) believes that these are strengths that naturally place social justice and pragmatism together. Researchers make their own choices about what is of interest or what is appropriate based on their own personal history, background and cultural assumptions (Morgan 2014). This highlights the need for researchers to be cognisant of their own values, attitudes, and biases and acknowledge how these could impact on the research process and findings. They influence which questions are asked or not asked, the type of data that is collected or not collected, and the interpretation of that data (Hesse-Biber 2012). According to Morgan (2014), the significance of values in research for the pragmatist supports the inclusion of axiology as a philosophical element. However, the fact that these principles are inherent in pragmatism's core assumptions about the nature of inquiry excludes the need for their formal recognition as the separate element of axiology alongside ontology, epistemology and methodology in the pragmatic paradigm.

3.2 How does my personal history influence my philosophical assumptions?

While philosophical assumptions are not explicitly stated in many research papers there is a need for me as a PhD student to examine how my own *'conceptual baggage'* (Hsiung 2008, p212) has influenced my philosophical assumptions and acknowledge how these will ultimately affect my approach to the research process. This account is structured to address the particular questions that Patnaik (2013) states reflexive researchers need to consider during the research process.

My experience of caring began early for me when as a nine-year-old I regularly helped my mother care for my grandmother who was living with us. She had dementia and later suffered from a stroke, and was nursed at home until she died. Then as a

teenager I undertook voluntary work, on both a Children's ward and a Care of the Older Person ward, along with two friends who were working towards gaining Guide badges. From there it seemed like a natural progression to commence my nurse education on leaving school. Since qualifying as a nurse, I have worked 19 of my 20 years of clinical practice in EDs. It was never my intent to have a career in emergency care as I had wanted to work in cardiology when I qualified. There were no nursing posts in cardiology, therefore I was sent to work in Fracture Clinic. My initial reaction was one of horror as I felt that this was not 'real' nursing. I felt that the fast pace and 'one-off' encounters meant there was little time to build any rapport with patients. Once there, however, I settled in immediately and loved the work, and the learning culture that was present in that department. I found that the work that I had previously discounted as task orientated could really make a big difference to patient's wellbeing. When I applied to a hospital closer to home I was allocated a post in ED, as it was considered that my previous experience in Fracture Clinic would be useful there. Again, I loved the work immediately. ED is a practical, hands-on specialty which appealed to my practical nature. I enjoyed learning new clinical skills and knowledge, and caring for the broad range of patients who attended ED. I am always keen to develop myself professionally and over the years I held the positions of staff nurse, ward sister and nurse practitioner. I loved mastering the challenges each new role brought.

I am unsure as to whether my past experiences have moulded my thinking or whether my outlook has directed the path I have taken, but I would consider myself to be a pragmatic, concrete thinker, and philosophically I relate to the pragmatic paradigm. I believe that there is probably one reality 'out there', but that we as individuals will all have our own personal interactions with that reality. These are subjective and formed by our own values and beliefs which are products of our social and cultural backgrounds. I believe that knowledge is ever changing and therefore 'truths' are only

truths until they are disproved or replaced by a better interpretation. I have this seen many times over the years in ED nursing where what was once considered ‘knowledge’ and ‘best practice’ has been overturned and superseded by newer, superior knowledge and practices. I have no particular allegiance to either quantitative or qualitative methods, and see that each brings its own value to different aspects of a study. I believe that researchers should use the research method that most effectively addresses the research aim and objectives. Therefore, I agree with Morgan (2007) that the methodology should be the central in linking the philosophy of the study with the research design and methods.

During my latter years in ED emergency care changed dramatically, due to a number of the reasons already cited in chapter 1. These factors contributed to creating a very challenging working environment in ED for which there seemed to be no solution at that time. Attendance numbers were high and waiting times long. I felt that there was never enough time to spend with patients and that their needs were often not fully met. At times I was unhappy with the level of care I could deliver. I was working in an environment where there were a lot of unhappy and stressed staff, who felt overworked and undervalued by the system. I eventually realised that my own feelings were having an adverse impact on both my ability to care for patients and staff around me, and my own personal life. I knew that I needed to change my direction and actively began to look elsewhere for alternatives. Looking back, I value the years spent in ED and the experience and knowledge I gained there, and appreciate how they contributed to where I am today. In teaching I feel that I can make a positive contribution in nursing, and continue to be involved in ED work from a different perspective. The opportunity to undertake my PhD meant that I could choose the topic that I wanted to research. I felt that I needed to research something that could have a positive impact on the care experience for staff and service users in ED. I am aware that researching in an area that is familiar raises a number of issues and these are

discussed below in section 3.3. Riemer (1977), however, advocates using timely events and familiar situations where a researcher already has their own particular expertise for opportunistic research. The main driving force for this topic was my latter negative experiences of working in ED, and the fact that in the current political climate at that time, this seemed to be still worsening. I felt that this study had the potential to identify what the issues were in the ED environment and how these could be addressed to make a more positive ED environment for staff and service users. In this way my own values are incorporated into this research study. Like pragmatists, I believe that values, are and should be, incorporated into all research. In this sense researchers are active participants in the co-creation of knowledge, rather than being passive bystanders. I believe our values are present in the topic we choose to study, the questions we ask and those we don't, who we study and who we don't, and the analysis and presentation of the findings (Finlay 2002). They mould and shape who we are, and we as researchers will almost always bring our own influence to the research process, regardless of what data we work with or what paradigm we use.

3.3 How does my culture and professional background influence my positioning in this topic and my relationship with the participants?

According to Hsiung (2008, p213) when researchers are required to identify their

> *"…positions and locations along the insider-outsider continuum, they become aware of the strengths and potential pitfalls".*

In this research study my positioning or location varies from the perspective of different participants. The nineteen years spent working in ED means that I can relate to many of the experiences staff participants speak of, both positive and negative. Corbin Dwyer and Buckle (2009) caution how common shared experiences could

cause a researcher to view a situation more favourably instead of trying to look for negative aspects. This was something that I was conscious of when collecting and analysing the data. I needed to ensure that it was the participants' voices that were being heard rather than any sympathetic interpretation of them from me. Corbin Dwyer and Buckle (2009) further highlight how the participants' experiences may become clouded by the researcher's experiences due to difficulty in separating the two from each other.

The specialty of emergency care within ED is relatively small, and staff, particularly senior staff tend to be known to others, even if only by name. I practise occasionally as a bank nurse practitioner to maintain my clinical skills and through this still relate to staff on a clinical level. I have many ex-colleagues working at various levels throughout the EDs studied. Through this I could be considered culturally and professionally similar to them, and could be considered by many to be an 'insider'. In this there are disadvantages as well as advantages. According to Coghlan (2007) there is the danger that insider researchers may assume too much and not probe deeply enough, feeling that they already understand the issues under study. Conversely a participant may assume that the researcher already understands and therefore not explain the experience fully (Corbin Dwyer and Buckle 2009). This has the potential to achieve superficial subjective understanding of the topic. For me this reinforces the need to accurately represent the participants' data and highlights the need for attention to rigour in the research process which is discussed in section 4.9.2. There are also very real advantages being an insider researcher. These include a pre-understanding of the organisation's everyday life, being able to use the jargon, understanding what is legitimate and what is taboo to discuss and being able to see beyond "window dressing" to what lies beneath (Coghlan 2007, p296). In addition, insider researchers tend to be more comfortable and confident in the setting to facilitate effective interaction (Borbasi et al. 2005) and are more likely to be readily

accepted, therefore participants tend to be more open and reveal a greater depth of data (Corbin Dwyer and Buckle 2009). Because of these factors I felt my position as an insider researcher was an advantage and eased my access to participants in this study.

An additional consideration was that there were current or previous students among the sample population. I was concerned that there was a potential for a perceived power imbalance where these students may have felt compelled to participate in the research or answer in a way that they perceived I wanted to hear. Hsiung (2008, p221) reported how student interview participants wanted to please the interviewer and tried to give the “right answer” and be as informative as possible. There was the potential for a similar perceived unequal power status to exist between the researcher and service user although service users had no prior reference frame of me as either an ED nurse or a university lecturer. As seen in Appendix 12, the Participant Information Sheet introduced me as a part-time university student, however I would have disclosed this information if asked. Haigh et al. (2005) discussed the power balance between researcher and participant and dismissed this concern. They instead showed how patient participants appreciated the fact that researchers listened to and acknowledged them, and actually worked being researched to their advantage. They described how they used them to air their grievances and accessed them as information givers. Voluntary participation for both staff and service users ensured that only those who genuinely wished to participate would volunteer to do so, and holding the interviews in a place of the participant’s choice ensured that they chose a place where they felt at ease.

3.4 Summary

This chapter discussed the main tenets of the pragmatic paradigm and how as a philosophy it addresses the apparent incommensurability between the positivist/post-positivist and interpretive paradigms. The centrality of methodology as the connection between epistemology and methods ensures that it is the aim and objectives of the study that drives the inquiry and gives attention to these both (Morgan 2007). This approach facilitates the integration of both qualitative and quantitative findings within the one study and ensures that the complementary aspects are combined to provide shared meaning from both datasets. Figure 3.2 illustrates the centrality of methodology and how it connects to the epistemology and research design and methods employed in this study. The mixed methods methodology will be discussed in detail in the next chapter.

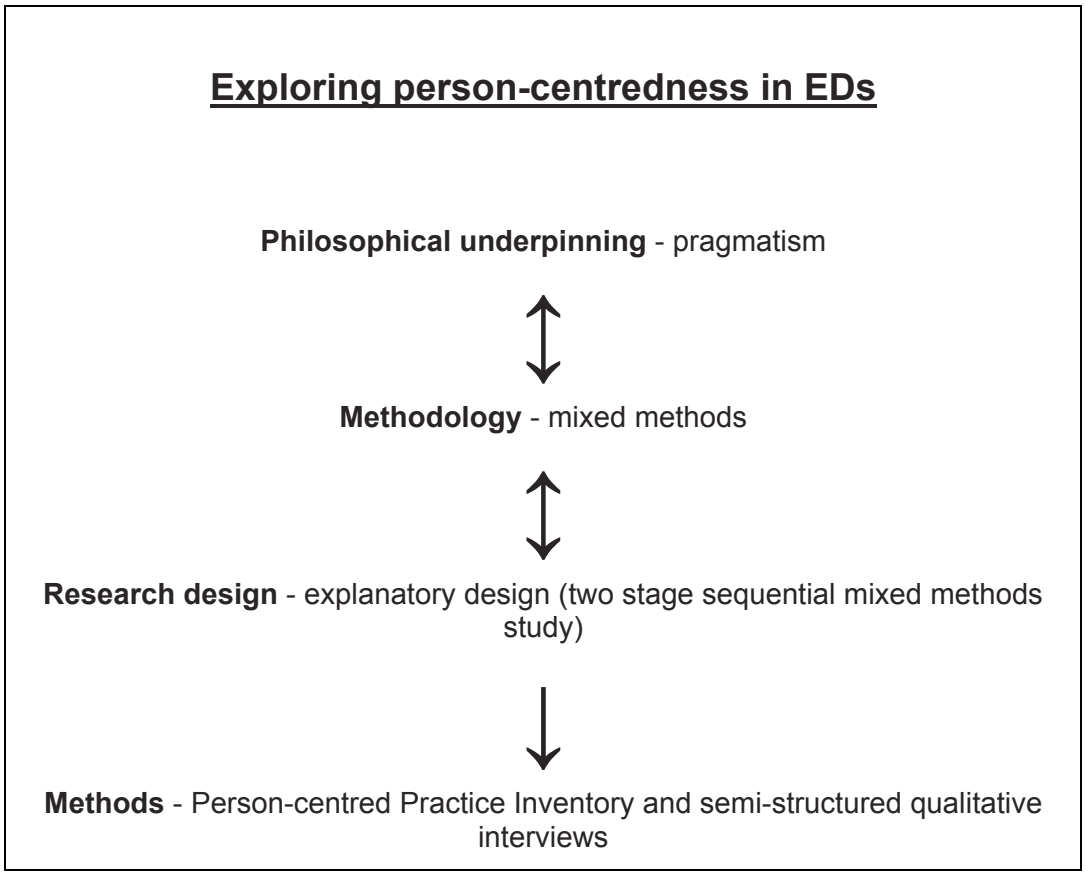

Figure 3.2: A summary of the study philosophical stance, methodology and methods

CHAPTER 4: METHODOLOGY

This chapter presents an overview of the methodology of the study including the justification for the use of a mixed methods approach, the research design, and the methods employed in the study. It will discuss the instruments used for data collection, the data analysis, ethical considerations and provide the rationale for methodological decisions made. For ease of reference the aim and objectives of the study are restated.

4.1 Aim and objectives

The aim of this study was to explore person-centred practice within the ED environment. To achieve this, the following objectives were identified:

1. To explore the relationship between attributes of nurses and doctors, their engagement in care processes and the care environment from a staff perspective.
2. To investigate how the relationships identified from objective 1 are experienced by staff and service users.
3. To psychometrically test the Person-centred Practice Inventory (staff) (PCPI-S) in relation to the ED population.

4.2 How the Person-centred Practice Framework underpins this study

The theoretical framework which underpinned this study was the Person-Centred Practice Framework (PCPF) (McCormack and McCance 2010, 2017) which was presented in the review of the literature in chapter 2. The framework underpinned many of the aspects of the data collection and analysis for this study. The

questionnaire in the quantitative stage was the PCPI-S which was derived from the PCPF to specifically test relationships between three of the framework domains: the Prerequisites of the staff; the Care Environment and the Care Processes they engage in (Slater et al. 2017). This is further discussed in section 4.6.2. As can be seen in section 4.7.4, the interview schedule also contained questions relating to the domains of the framework and the impact each of these had on the ED experience for the participants. Statistical data analysis in the quantitative stage included testing relationships between variables, constructs and domains within the framework. This involved undertaking confirmatory factor analysis to determine the validity and reliability of the PCPI-S constructs in relation to the PCPF (see chapter 5). In addition, chapter 6 details how path analysis was undertaken to assess the relationships between the three of the domains of the PCPF used, as measured by the PCPI-S. In the interpretation stage the framework was used to identify the relationships that were found in the ED data.

4.3 Mixed methods methodology

Mixed methods studies involve *"integrating quantitative and qualitative data collection and analysis in a single study or programme of inquiry"* (Creswell et al. 2004, p7). O'Cathain et al. (2007) states that it has the potential to produce knowledge that is unavailable from undertaking a qualitative and quantitative study separately but there needs to be justification for its use over using these methods individually. This study uses a two-stage mixed methods approach and the following factors influenced the design. To examine person-centredness in EDs required more than the use of one method, as the overarching aim comprised of two different but complementary objectives. The methods undertaken were selected for their ability to address each of the objectives thus contributing to the overall research topic.

The first objective was to explore the relationship between attributes of nurses and doctors, their engagement in care processes and the care environment from a staff perspective. This involved examining relationships between variables and it was therefore decided that a quantitative approach would be adopted. The literature revealed that a range of factors such as staffs' attributes and how EDs were managed impacted on how staff delivered care within that environment. The instrument designed to measure the factors comprising person-centredness, the Person-centred Practice Inventory (staff) (PCPI-S) (Slater et al. 2017), was selected to measure the presence of these factors and how the relationships between these occur in the care environment.

The second objective was to investigate how the relationships identified from objective one was experienced by staff and service users and how this related to how staff and service users' experienced care in ED. It was felt that a qualitative approach would be best to hear their voices and gain insight into how the relationships revealed are experienced by them. To achieve this, semi-structured interviews were selected. In addition, this stage had the additional benefit of allowing staff to elaborate on, or explain the quantitative findings, which according to Creswell and Plano Clarke (2007) is a situation where mixed methods is the preferred approach to addressing a research problem.

4.3.1 Justification for the use of mixed methods

Greene et al.'s (1989) seminal work on justification for using mixed methods is still discussed in more current literature (Bryman 2006; Moran-Ellis et al. 2006; Combs and Onwuegbuzie 2010; Onwuegbuzie and Combs 2010). As shown in Table 4.1 it identified five broad purposes for using mixed methods studies of triangulation, complementarity, development, initiation and expansion.

Table 4.1: Five broad purposes for using mixed methods studies (Greene et al 1989).

Purpose	Process	Objective
Triangulation	Data is gathered from a number of different sources, or investigators, or the use of different methods within one study, to examine the same phenomena.	The results converge to confirm a single reality for confirmation or completeness.
Complementarity	Quantitative and qualitative methods are used to examine overlapping or different facets of a single phenomenon rather than the same phenomena	To elaborate, enhance, illustrate or clarify the results from the other method.
Development	Different methods of (usually) equal status are undertaken sequentially within a study.	The results of the first method inform the next strand.
Initiation	The use of qualitative and quantitative methods in one study to uncover paradoxes and contradictions.	To form interpretations, propose further analysis, or recast the entire research question.
Expansion	The use of different methods for different inquiry components of a distinct phenomenon.	To extend the scope, breadth and range of inquiry.

In this study the purpose for using mixed methods was not to have the results converge to confirm a single reality as in triangulation (Sandelowski 1995). The first objective examined the relationship between ED staffs' perception of their attributes, the care environment and the care processes they engaged in. The second objective looked at an overlapping, rather than the same, aspect of this to examine how these relationships were experienced by both staff and service users. A further reason for objective two was to illuminate, elaborate on and enhance the findings from objective

one. For these reasons complementarity was a feature of this study, rather than triangulation. Greene et al. (1989) state that for complementarity purposes the methods are best implemented simultaneously within a single study however this was not a feature of this study. In this mixed methods study development and expansion were also notable features. This study required stage one findings to help develop the interview schedule. In addition, following stage two data analysis, the results from the qualitative stage were used to revisit and further inform the analysis from stage one. Expansion was seen in the use of the different methods of a survey to explore the relationships between components of person-centredness in EDs, and semi-structured interviews to explore the impact of these relationships on staff and service users. While initiation was not originally a purpose for selecting a mixed methods approach, it did become a feature of the study as findings from each dataset revealed some divergences which required further examination.

4.4 Research design

Once a mixed methods approach has been chosen the specific design should be selected which best suits the research question (Creswell and Plano Clarke 2007). Polit and Beck (2012) state that no typology will ever encompass every possible mixed methods design, since a hallmark of this approach is that it permits creativity and an emergent approach to design. Creswell et al. (2011), however, consider that the design should be determined by the research question and whether the quantitative and qualitative datasets are to be merged into one analysis or interpretation, or whether one dataset builds on the results of the other. They identified five broad functional classifications of convergent, sequential, embedded, transformative and multiphase designs. In convergent or triangulated design studies, qualitative and quantitative data are collected simultaneously and separately to give complementary data about the same phenomenon (Polit and Beck 2012). Sequential designs are a

two-stage design, where one dataset helps develop or inform the other (Creswell et al. 2011). There are two main types of sequential designs: exploratory and explanatory designs (Creswell and Plano Clark 2011). In the exploratory design qualitative data is used to explore the topic before a second quantitative stage is undertaken, while in explanatory designs an initial quantitative stage can be explained through a qualitative follow up (Creswell et al. 2011; Creswell and Plano Clark 2011). Embedded designs can be undertaken concurrently or sequentially with one type of data being dominant and the other type of data being used to support it (Polit and Beck 2012). They state a feature of this design is that the secondary data is subservient and could not stand on its own merit without the other. Transformative designs are shaped by the researcher within a transformative theoretical framework, and adopt methods from any of the other designs which are guided by what best suits the goals of the study (Creswell and Plano Clark 2011). Multiphase designs involve multiphase projects conducted over a period of time, and are linked together by a common objective with each stage building on the other (Creswell et al. 2011).

Each design differs in relation to the timing, weighting and mixing of data (Onwuegbuzie and Combs 2010). This study demanded that in addition to addressing the second objective, the qualitative stage two data would build upon and explain the initial quantitative stage one data. This is particularly useful in explaining significant and non-significant results (Creswell and Plano Clarke 2011) and unexpected findings (Morse 1991). The timing in a sequential approach determines whether it is an exploratory or explanatory design, therefore a two-stage sequential explanatory design was selected. In addition, the weighting and mixing of the data needed to be considered.

The literature reveals that there is no consensus on weighting or priority within mixed methods studies. Morse (2010) states that both aspects cannot be equally weighted

and that the first step is to determine whether the research is to be quantitatively or qualitatively weighted. O'Cathain (2010) and Creswell and Plano Clarke (2011) disagree and state that priority can be given to either the qualitative or quantitative data or they can also be given equal weighting. In a sequential explanatory design priority is typically given to the quantitative data (Creswell and Plano Clarke 2011), however it was felt that in this study the qualitative data was as significant in contributing to the overall findings as the quantitative data and therefore each should be given equal status. This is supported by Onwuegbuzie and Combs (2010) who state that both quantitative and qualitative stages should be of equal weighting where each carries equal status in addressing the research question. O'Cathain (2010) further states equal weighting should be the given where each method contributes to knowledge development in its own right, rather than merely facilitating the other. Morse (1991) developed a notation system whereby uppercase and lowercase letters indicated which component had greater or lesser priority, concurrent methods were annotated with a plus sign and sequential methods with an arrow. Using this system this study can be illustrated by the following visual presentation **QUAN → QUAL**, where each have equal weighting and the qualitative component is preceded by the quantitative.

The mixing or integration of the data is essential in any mixed methods study as according to O'Cathain et al. (2010) without this the knowledge yield is no greater than that achieved from a qualitative and a quantitative study undertaken independently. Integration in this study has both a connecting and a merging aspect. Quantitative results from stage one connected or led to the development of the interview schedule for stage two. In addition, the datasets were merged in the interpretive stage, allowing clarification and elaboration of the quantitative findings

with rich qualitative data. Figure 4.1 shows where the justification for using mixed methods and integration of the datasets took place.

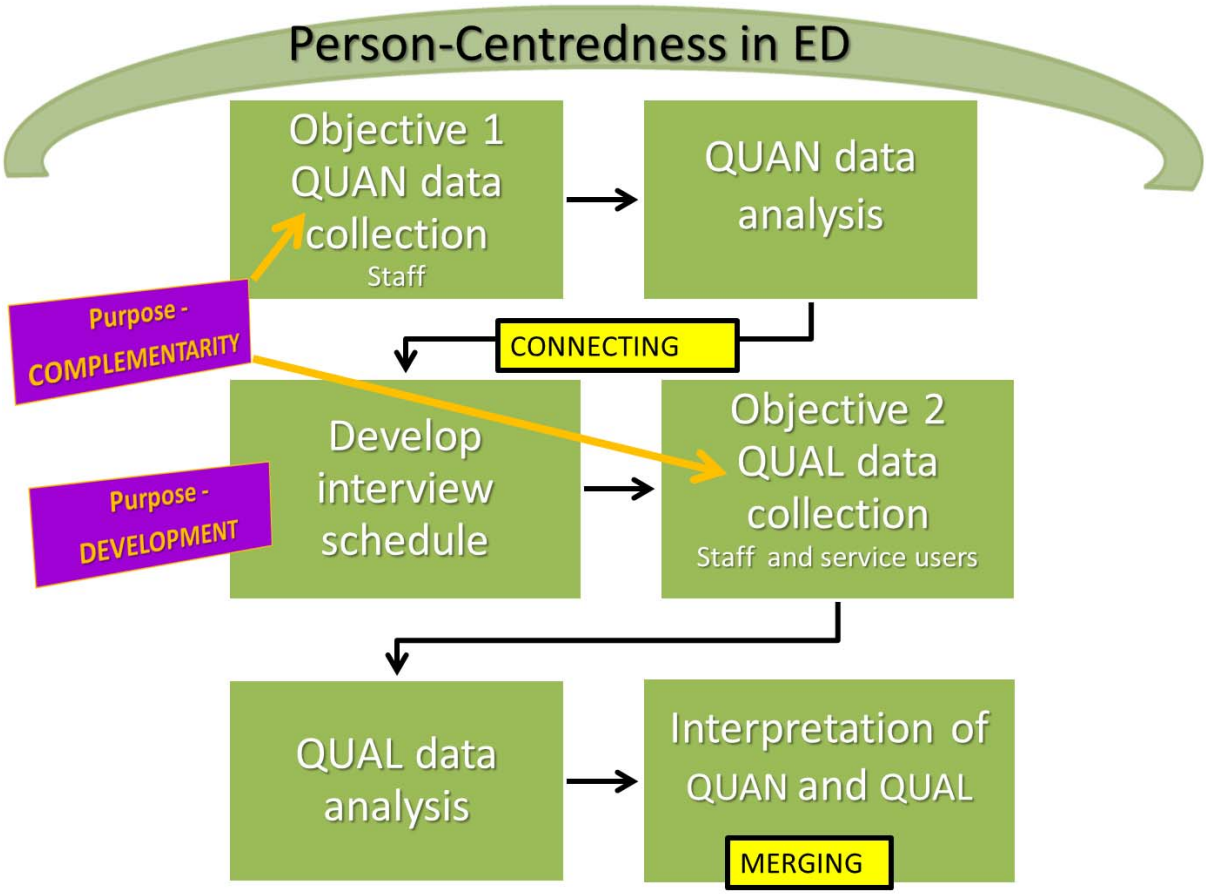

Figure 4.1: Justification for mixed methods use and stages of integration of data

4.5 The research setting

The study involved staff and service users from all eleven Type 1 and Type 2 adult Emergency Departments within Northern Ireland. Figure 4.2 shows the geographical location of each ED.

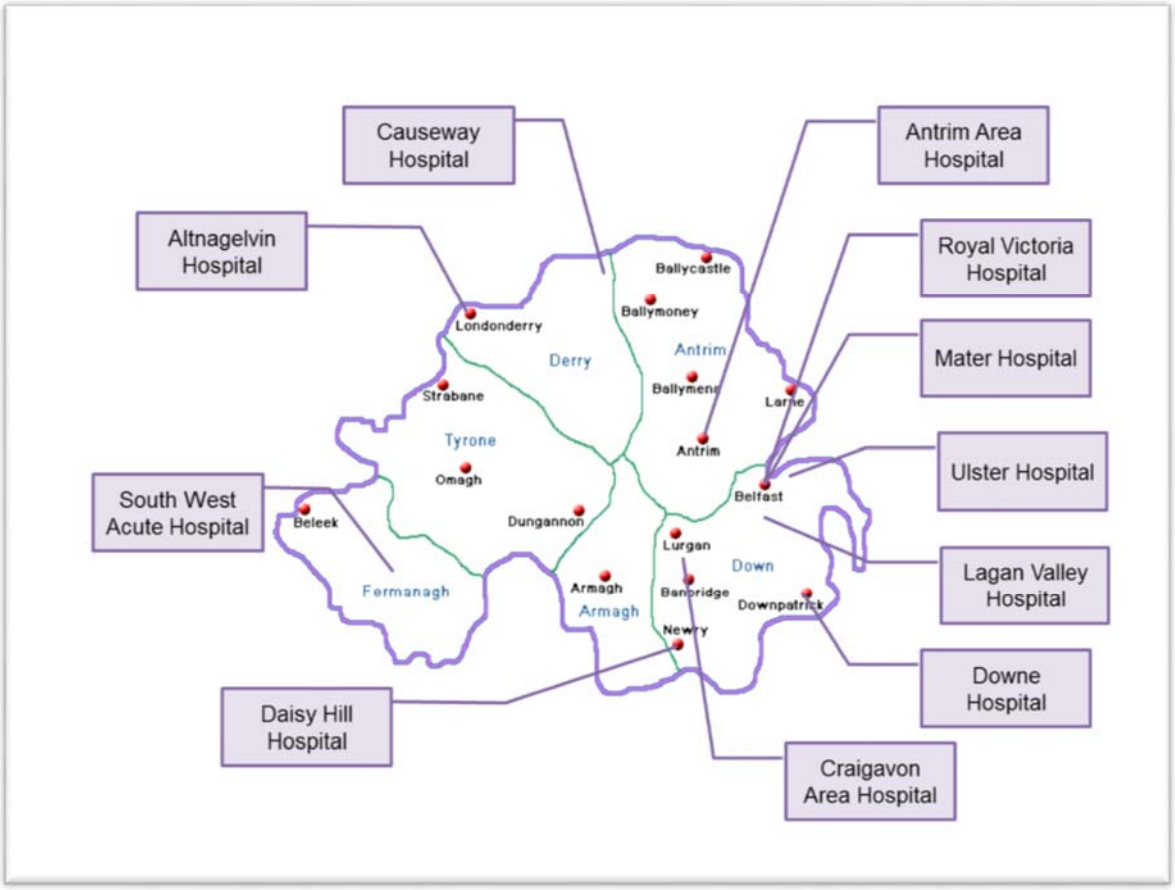

Figure 4.2: Location of Type 1 and Type 2 EDs (n = 11) within Northern Ireland

The definition of a Type 1 and Type 2 ED (DHSSPS 2007) is provided in Table 4.2. The decision to exclude the one exclusively paediatric Emergency Department was based on the distinctive care pathway experienced by children and their families in emergency care. Care for children in EDs is guided by the Standards for Children and Young People in Emergency Care Settings (Royal College of Paediatrics and Child Health 2012), and emphasis is placed on family and carer involvement. It was considered then that this set children's emergency care apart from the adult ED experience and they should therefore be excluded from this study.

Table 4.2: Definition of a Type 1 and Type 2 ED

Type 1 Emergency Department: a consultant-led service with designated accommodation for the reception of emergency care patients, providing both emergency medicine and emergency surgical services on a round the clock basis.
Type 2 Emergency Department: a consultant-led service with designated accommodation for the reception of emergency care patients, but which does not provide both emergency medicine and emergency surgical services and/or has time limited opening hours.

The reason for the exclusion of Type 3 EDs, or minor injury units, is that their structure and function differs considerably from the Type 1 and 2 EDs. They have limited opening hours and treat only a narrow range of patients presenting with minor conditions and therefore the staff and patient experience of treatment there could be expected to differ significantly.

4.6 Stage 1: Quantitative stage

Stage one of the study addressed objective one and objective three by undertaking a quantitative survey using the PCPI-S. For objective one relationships between constructs within the PCPF (McCormack and McCance 2010) were examined. To achieve objective three the PCPI-S measurement tool was psychometrically tested with the ED population.

4.6.1 The sample and sampling procedures

A census sample of all qualified nurses and doctors working in the adult type 1 and type 2 EDs in NI was used. The inclusion and exclusion criteria are shown in Table 4.3.

Table 4.3: Inclusion and exclusion criteria for stage 1 of the study

Inclusion criteria
All contracted registered (RN's) and medical staff working in the eleven adult Type 1 and Type 2 EDs in Northern Ireland
Exclusion criteria
ED nursing and medical staff employed through a bank or agency

Staff employed through a bank or agency were excluded as it was felt that if they only worked there on an ad hoc basis they may not have sufficient experience and knowledge of the ED work environment. The number of eligible staff was determined by asking each departmental manager for their staff numbers. At time of data collection this totalled to 528 nurses and 186 doctors. The demographic profile of the respondents can be seen in section 7.1.

Sample size

Sample size is evaluated to establish the power of the study and assess the potential for non-responder bias (Bethlehem 2009). Non-responder bias is discussed further in section 4.9.1. A power calculation was undertaken to determine the number of participants that were needed for sufficient power to ensure validity of the findings. This is designed to prevent making a type 1 error, where significant findings are found that do not exist, or a type 2 error, where no significance is found in the in the sample when one does actually exist (Pallant 2013). This was undertaken using a sample size calculator available online at Creative Research Systems (2015). The confidence interval, or margin of error, was set at 5% meaning that 95% of the results would be representative of the true population (Niles 2015). The confidence level which represents how often the confidence intervals would include the true population was set at 95%. The calculation below in Figure 4.3 shows how for a total population of

714 staff, a sample size of 250 was required. Response rates for online and hard copy surveys, not administered face to face, typically achieve a response rate of approximately 33% (Nulty 2008).

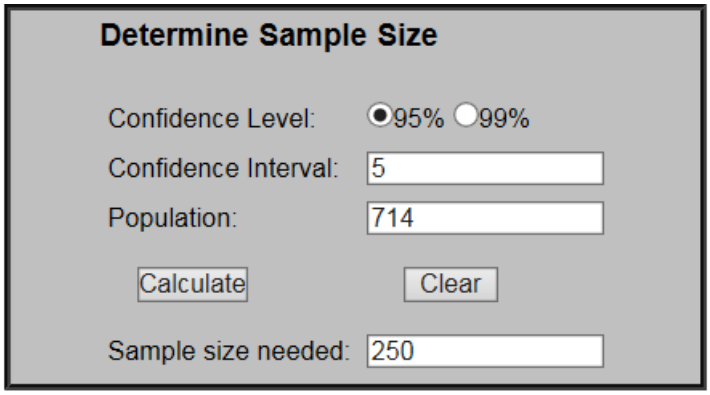

Figure 4.3: Creative Research Systems calculation for sufficient power to ensure validity of findings

4.6.2 Data collection tool

The data collection tool was the Person-centred Practice Inventory-Staff (PCPI-S). It is a validated questionnaire designed to directly quantitatively measure the 17 person-centred constructs within three of the domains of the PCPF; the *prerequisites* of staff, the *care processes* they engage in and the *care environment* they work in (Slater et al. 2015). It consists of 59 Likert type questions measured on a five-point scoring range, from 1 (strongly disagree) to 5 (strongly agree). The items were devised using the Delphi technique with a range of national and international partners in the field, thereby ensuring content validity (Slater et al. 2017). The PCPI-S was evaluated in acute hospital settings using a sample of nursing staff drawn from four health and social care organisations in one region in the UK (Slater et al. 2017) and statistically tested using confirmatory factor analysis (CFA) to verify how well the measured variables actually represent the latent constructs (Hair et al. 2010). Slater et al.'s (2017) study showed the PCPI-S to be a psychometrically sound instrument with a

high level of construct validity, and led to its refinement from the original 96 items to the current 59 item questionnaire used in this study. They acknowledge, however, that the PCPI-S is still in the early stage of development and highlight the need for further testing of the instrument using health professionals other than nursing staff, to provide further statistical evidence in the areas of reliability and additional validity testing.

4.6.3 Pilot study

Prior to main data collection for stage one, a pilot study took place in August 2013. According to van Teijlingen and Hundley (2001) this is useful to test the acceptability of the research instrument and the data collection process. Four nurse-led Minor Injury Units within two trusts in NI were used as these were excluded from the main study. Following ethical approval, all twenty-three registered nurses employed within the four Minor Injury Units were invited to participate, and nineteen (83%) fully completed questionnaires were either returned in hard copy or completed online. In addition, staff were asked to feedback on the ease of the process, the readability of the questionnaire, and if there were any demographic questions that would discourage them from completing an anonymous questionnaire. The data collection process worked well. Data from the hard-copy questionnaires were uploaded into Qualtrics and these, along with the completed on-line questionnaires, were successfully transferred into Statistical Package for the Social Sciences (SPSS). Teijlingen and Hundley (2001) highlight how feedback to identify problem questions is a useful function of a pilot study. Feedback from participants suggested that asking a combination of questions relating to which trust staff were employed in, gender and banding would discourage some from participating as they felt they could be identifiable from this. Following this feedback, it was decided that no gender or employing trust would be asked for in the main study. Instead four demographic

questions were asked to establish size of ED worked in, profession, length of total clinical experience, and number of years ED experience. EDs were divided by size into those who treated more or less than 50 000 new patients annually. This was designed to assess if the care experience differed for staff in relation to ED size.

4.6.4 Data collection process

Questionnaires were constructed in hard copy using TeleForm automated data capture software and for on-line completion using Qualtrics Online Survey Software. The researcher delivered individual envelopes which contained a Participant Information Sheet and a questionnaire (see Appendices 2 and 3) to the ED manager. The manager or another nominated person in each department distributed these to all staff currently working within the department who met the criteria for completion. The Participant Information Sheet explained the purpose of the study, what participating involved and the researcher's and supervisors' contact details. Consent to participate in stage 1 was implied if participants completed and returned the questionnaire in the pre-paid envelope. Details of how to access the on-line version were also provided. A total of 714 questionnaires were distributed. A reminder for completion was sent to each department after two weeks, with a further final reminder sent two weeks later.

Questionnaires that were returned in hard copy were scanned using the TeleForm automated data capture software. These were then compared to the pre-defined template which had been constructed using the software. Forms which had unrecognised characters or those considered non-complying were flagged for verification by the researcher. This data was then exported into an SPSS file. Data collected in Qualtrics Online Survey Software was also exported to an SPSS file. These files were then merged and analysed using SPSS 21. Downloading the data

directly from the online survey package and TeleForm into SPSS eliminated the possibility of data entry errors such as entering out of range data or mistyped responses. Figure 4.4 illustrates this data collection process.

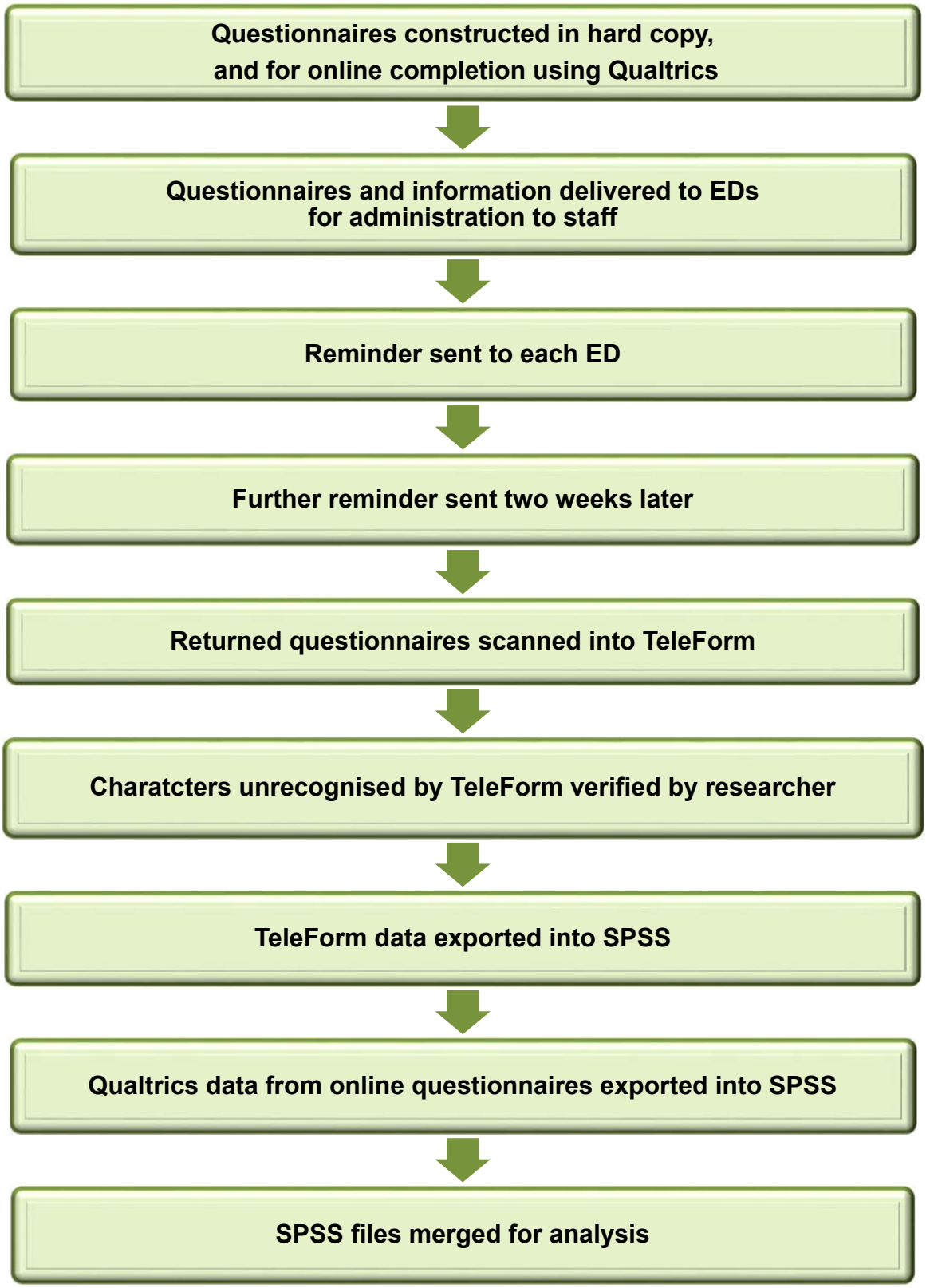

Figure 4.4: Stage 1 data collection process

Strategies to increase response rate

A number of strategies were employed in an attempt to increase the response rate for the survey. Following research ethics and governance approval each ED manager was approached with a request to meet with staff prior to both stages, to discuss the study. Available forums such as staff meetings were used to generate awareness and promote interest. Response rates to questionnaires have been found to increase when participants were contacted prior to the study and the topic was of interest to them (Edwards et al. 2002, 2009). The use of a key link person in each department was found to be invaluable in promoting the research at subsequent staff meetings and handovers during the data collection stage.

Questionnaires were constructed in hard copy and for on-line completion. Facilitating multiple modes of response reduces the chance of biasing the data by catering for the various needs, abilities or preferences of participants (Nulty 2008) and should achieve a higher response rate (de Leeuw 2005; VanGeest et al. 2007). Staff were assured that the questionnaires were anonymous, a factor also found to increase response rates (Edwards et al. 2009). A cover letter (see Appendix 4), postage-paid return envelopes and follow up reminders (see Appendix 5) were all used to increase response rates (Edwards et al. 2002). In addition, a scanned signature was used on the cover letter and envelopes containing the questionnaires were addressed to named staff by a designated person in each ED. Scott and Edwards (2006) found that personalising literature and using signatures increased the proportion of returned questionnaires although there was no evidence if scanned signatures had the same impact.

4.6.5 Data analysis

Quantitative data analysis was undertaken in a number of stages and included testing for missingness and management of missing data, normality of distribution, undertaking multivariate data analysis, and exploration of the data using descriptive and inferential statistics.

1) Assessing missingness, and management of missing data

Prior to running statistical analyses, an examination of the data was performed to assess for missing values on variables. According to Hair et al. (2010) it is important to establish any patterns or relationships and also the extent of the missing data as patterns may identify a reluctance to answer particular questions and therefore subsequent biases. An examination of the data inputted to SPSS revealed that the majority of questionnaires containing missing data were transferred there from the on-line software Qualtrics. These revealed a pattern of missingness where participants who had started, had failed to complete the entire questionnaire. Hair et al. (2010) recommends that questionnaires with over 20% of answers missing should either be deleted, or techniques adopted to address the missing data. These techniques include ‘complete case analysis’, ‘available case analysis’, ‘single-value imputation’, ‘maximum likelihood’ and ‘multiple imputation’ (Piggot 2001, p362). As the questions in the questionnaire were in a random sequence and were not grouped according to their constructs this did not considerably affect one sub-scale more than another. Twenty-three questionnaires had more than 20% of the total responses missing, which equated to twelve questions, and these were deleted entirely from the analysis. For the remaining questionnaires which had missing data the ‘Exclude cases pairwise’ option was selected in SPSS. This is a method of ‘available case analysis’ and excludes cases only if they are missing the data required for that particular analysis but the case will still be included in any of the other analyses for which it has the required information (Pallant 2013).

2) Assessing normality of distribution

An assessment of normality is required prior to undertaking statistical tests as normally distributed data is an underlying assumption in parametric testing (Pallant 2013). The two main methods of assessing normality are numerically and graphically, and according to Field (2009) and Hair et al. (2006), both should be used when assessing the actual degree of departure from normality. Numerically this can be tested by examining the skewness and kurtosis and the Kolmogorov-Smirnov and the Shapiro-Wilk tests of normality. This was assessed at domain level. The skewness and kurtosis of the constructs are reported in detail in chapter 5. It is noted here, however, that kurtosis of the sub-scale *'clarity of beliefs and values'* which is contained in the *Prerequisites* domain was high at 3.226. All others were within satisfactory limits.

Examination of the 5% Trimmed Mean revealed that there was very little difference made to the mean by the extreme cases in each domain: *Prerequisites* mean 20.1205, 5% trimmed mean 20.1483, *Care Environment* mean 24.0592, 5% trimmed mean 24.1878 and *Care Processes* mean 19.8491, 5% trimmed mean 19.8332. It was decided on the basis of this that any outliers should be retained within the data.

The Kolmogorov-Smirnov and Shapiro-Wilk results are given in the Table 4.4 below. A non-significant value of 0.05 and above indicates normality (Field 2009, Pallant 2013). As can be seen the distribution for *Prerequisites* is normally distributed, however for *Care Environment* and *Care Processes* the assumption is violated, meaning the data is not normally distributed. Field (2009) and Pallant (2013), however, warn that with large sample sizes it is very easy to get significant results from small deviations in normality and therefore it should not be used in isolation.

Table 4.4: Kolmogorov-Smirnov and Shapiro-Wilk tests of normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Prerequisites	.043	308	.200	.994	308	.254
Care environment	.063	308	.005	.983	308	.001
Care processes	.074	306	.000	.986	306	.004

Examination of the graphical results; the histogram, Q-Q plots, detrended normal Q-Q plots and boxplots also revealed a normal distribution for *Prerequisites* and non-normal distributions for *Care Environment* and *Care Processes* results. Based on the results from all of the outputs it was decided that parametric statistics would be used for analysis of the *Prerequisites* scales and non-parametric statistics for the *Care Environment* and *Care Processes* domains.

3) Multivariate data analysis

Multivariate data analysis of the data was undertaken and included conducting the statistical procedures of confirmatory factor analysis (CFA) and path analysis using the statistical package MPlus version 7.3. For missing data, pairwise deletion of missing cases was selected.

CFA was undertaken to provide a statistical measure of the measurement model to determine the fit between the 59 item PCPI-S and the data collected in ED, thereby providing confirmation of the questionnaire construct, and the validity and reliability of the PCPI-S (Hamdan et al. 2011). To achieve this item scores were examined for skewness and kurtosis, and correlation scores were examined to assess their correlation with other items within the same domain. Analysis of the measurement

model involved examining factor loadings to measure the relationship between the items and their associated construct and scrutiny of fit indices Chi square, degrees of freedom, Root Means Squared Estimates of Approximation and Confirmation Fit Indices to assess if the model's 'fit' was acceptable. This is discussed in detail in chapter 5. The Likert scales consisted of five categories ranging from 'strongly disagree' to 'strongly agree' meaning they were ordinal in nature and therefore the data was categorical. According to Hair et al. (2010) ordinal measurement scales containing four or more categories can be treated as continuous data, however several authors disagree (Lubke and Muthén 2004; Jamieson 2004; Allen and Seaman 2007) and state that this data should be treated as categorical. The Weighted Least Square Matrix Variance (WLSMV) estimator makes no distributional assumptions about the observed variables (Cheng-Hsien 2016) and therefore this was selected. As the PCPF (McCormack and McCance 2010) had already pre-determined which of the 59 variables loaded onto each of the 17 individual constructs within the PCPI-S, these were defined for analysis as shown in Table 4.5:

Table 4.5: The constructs of the PCPI-S and corresponding variables

Variables	Construct loaded onto
v1-3	'being professionally competent'
v4-7	'developed interpersonal skills'
v8-12	'being committed to the job'
v13-15	'knowing self'
v16-18	'clarity of beliefs and values'
v19-21	'skill mix'
v22-25	'shared decision-making systems'
v26-28	'effective staff relationships'
v29-32	'power sharing'
v33-35	'potential for innovation and risk taking'
v36-38	'physical environment'
v39-43	'supportive organisational systems'
v44-47	'working with the patient's beliefs and values'
v48-50	'shared decision-making'
v51-53	'engagement'
v54-56	'sympathetic presence'
v57-59	'providing holistic care'

Path analysis tests theoretical models that specify directional relationships among a number of observed variables and determines whether the model effectively accounts for the actual relationships observed in the sample data (O'Rourke and Hatcher 2013). In this study path analysis assessed the relationships between three of the domains of the PCPF, as measured by the PCPI-S. Model fit was determined using the same range of fit statistics as for CFA. Structural relationships were tested for direction and consistency with the theoretical expectations and the significance and strength of the

relationships were described. At this stage scores were summated to construct level. As the PCPF (McCormack and McCance 2010) had already pre-determined which of the 3 domains each of the 17 constructs loaded onto within the PCPI-S, these were defined for analysis as shown in Table 4.6:

Table 4.6: The constructs of the PCPI-S and their corresponding domain

Constructs	Domain loaded onto
'being professionally competent'	Prerequisites
'developed interpersonal skills'	
'being committed to the job'	
'knowing self'	
'clarity of beliefs and values'	
'skill mix'	Care Environment
'shared decision-making systems'	
'effective staff relationships'	
'power sharing'	
'potential for innovation and risk taking'	
'physical environment'	
'supportive organisational systems'	
'working with the patient's beliefs and values'	Care Processes
'shared decision-making'	
'engagement'	
'sympathetic presence'	
'providing holistic care'	

4) Exploration of the data using descriptive and inferential statistics

Descriptive and inferential data analysis was used to analyse the quantitative data. Descriptive analysis was used to present the frequency, percentage and mean

scores, the standard deviation, skewness and kurtosis for each of the items included in the instrument. The items that comprised each factor were summed and a mean score calculated for each factor. A range of inferential statistics were used. Parametric tests were applied for the *Prerequisites* domain, however the lack of normally distributed data in the *Care Environment* and *Care Processes* domains required the use of non-parametric statistics. Independent t tests and Mann Whitney U tests, which compare the mean scores of two groups on a continuous variable, were used to compare the impact of ED size and the impact of profession on each of the constructs. One-way between groups analysis of variance and Kruskal-Wallis were used to compare the means of two or more groups on a continuous variable. Post hoc comparison tests were used to determine which groups were significantly different from each other (Pallant 2013). Scores were examined across the demographic variables such as size of ED, profession, length of ED experience and length of time qualified.

4.7 Stage 2: Qualitative stage

The qualitative stage two addressed the second objective which explored how the relationships identified in stage one were experienced by staff and service users. In addition, it built on stage one to gain a deeper insight and understanding of results obtained.

4.7.1 Sampling and recruitment of staff

For stage 2, the inclusion and exclusion criteria for the staff sample were the same as stage one as shown in Table 4.7.

Table 4.7: Inclusion and exclusion criteria for stage 2 of the study

Inclusion criteria
All contracted registered (RN's) and medical staff working in the eleven adult Type 1 and Type 2 EDs in Northern Ireland
Exclusion criteria
ED nursing and medical staff employed through a bank or agency

The sample was those staff that contacted the researcher and were willing to be interviewed. It was recognised that due to staff turnover the sample population would differ slightly, however participation in stage two was not dependent on having participated in stage one.

Following analysis of the questionnaire from stage one, a summary of the main findings was compiled and distributed to staff prior to undertaking stage 2. This was designed to provide tangible evidence of their contribution to the study and encourage cooperation in stage 2 (Polit and Beck 2012). The researcher delivered individual envelopes to each ED manager or a nominated person to be distributed to all nurses and doctors currently working there who fulfilled the criteria. Each envelope contained a cover letter inviting an expression of interest to participate in stage two (Appendix 6), a summary of the findings from stage one (Appendix 7) and a Participant Information Sheet (Appendix 8). The Participant Information Sheet explained the purpose of the study, what participating involved, and information about the conduct of the study, and telephone and e-mail contact details of the researcher which potential participants could use to contact for further information. Once contacted, the researcher arranged to conduct the interview at a time convenient to the participant, and in a place of their choice. Prior to commencing the interview written consent was obtained (Appendix 9). The recruitment process was kept open until a satisfactory

sample size was obtained. How this was determined is discussed in greater detail in section 4.7.3.

4.7.2 Sampling and recruitment of service users

The sample for stage two were service users over the age of 18 who had attended any one of the eleven adult type 1 or type 2 EDs in NI. The inclusion and exclusion criteria used are presented in Table 4.8:

Table 4.8: Service user inclusion and exclusion criteria for stage 2 of the study

Inclusion criteria
Any service user over 18 years of age who attended any one of the eleven adult type 1 or type 2 EDs in NI
Exclusion criteria
Any service user deemed by nursing and/or medical staff as unfit to be approached at that time, due to illness, disability or distress

Two strategies were used to select service users for the study. First staff were asked to approach eligible service users, and secondly service users could self-select to participate. A dual approach was used to balance the possibility of selection bias either by staff who could select service users they felt were satisfied with their experience, or service users who felt motivated to be interviewed. Olsen (2008) states that the extent to which self-selected participants feel inclined to participate is correlated with the topic being studied, therefore those with strong feelings or an issue to relate are more likely to volunteer.

The researcher delivered a letter requesting assistance from the departmental manager (Appendix 10), information leaflets and posters (Appendix 11), and

Participant Information Sheets (Appendix 12) to the department manager or nominated person in each ED. Letters (Appendix 13) were also delivered for staff who regularly took charge of shifts. This letter requested staff to distribute leaflets to service users who met the inclusion criteria. In addition, leaflets and posters were displayed in each department's waiting rooms. The leaflets and posters provided some detail about the study and what participating would involve, and contained the researcher's contact details. Service users who were interested in taking part were requested to contact the nurse-in-charge or the researcher herself for further details. If they fulfilled the inclusion criteria they were then either given a Participant Information Sheet which provided further details by the nurse, or had one emailed or posted to them by the researcher. Following this, if they still wished to participate in an interview they were asked to contact the researcher who arranged to conduct the interview at a time and a place convenient to them. Patients who contacted the researcher were interviewed only after discharge from hospital as it has been found that on-site data collection can positively bias results (Burroughs 2005).

4.7.3 Ensuring adequacy of sample size

There is debate in the literature as to how many qualitative interviews should be undertaken in a study. Many qualitative researchers claim that they end data collection when data saturation is reached, and according to Guest et al. (2006), the concept of saturation has become the gold standard criteria in determining qualitative sample sizes. This term refers to the process of collecting and analysing data until no new findings are revealed (Mason 2010; Tay 2014). A number of authors acknowledge that the concept of saturation is problematic (Strauss and Corbin 1998; Tay 2014), and Strauss and Corbin (1998) contend that as there is always the potential for new findings to emerge, saturation should be considered when new findings do not add anything to the overall study. A number of factors have been

suggested to guide the qualitative sample size of any research, which was relevant to this study. These include: the study design (Ritchie et al. 2003); the scope of the study; the topic; the quality of the data (Morse 2000); and the available time and funding (Green and Thorogood 2009; Guest et al. 2006). Table 4.9 illustrates how the sample in this study was considered adequate to address these factors.

Table 4.9: Adequacy of the sample size to meet the aim of the study

The study design	The objective of the qualitative data in this mixed methods study was to illuminate and expand on the quantitative results and this was achieved using this sample.
The scope of the study	The sample represented a satisfactory range of professions/service users and size of EDs. All trusts were represented.
The topic	No new findings were revealed in latter interviews indicating the topic was satisfactorily addressed by the sample obtained.
The quality of the data	The quality of the data obtained was considered rich in detail and thick in quantity.
The available time and funding	Data collection and analysis of the sample size obtained was achievable within the necessary timeframe and resources of this study.

4.7.4 Data collection method

Semi-structured interviews were undertaken as the main purpose was to allow the participant to recount their own personal experience of their time spent in ED (Morphet et al. 2015). There were, however, specific topics which also needed to be addressed for completeness and clarification (Turner 2010; Polit and Beck 2012). Prior to commencing the interview written consent was obtained (Appendix 9). The interview schedule began with a broad open-ended question about the participants' experience of either working in ED (staff) or experience of care in ED (service user). This was designed to gain an overview and help develop a rapport (Tod 2006). Hsiung (2008) cautions against following an interview guide too closely as this can increase the likelihood of the interviewer being blinded by unchecked assumptions, and beliefs. Instead the interviewer should be open to what the participant says and respond accordingly. The schedules therefore contained a range of prompts to ensure specific aspects were explored, if they had not already been covered in their story. (Refer to Tables 4.10 and 4.11).

Table 4.10: Semi-structured interview prompts for service users

- their experience of being a patient/relative in ED
- the busyness of the department at that time
- how they felt about the treatment they or their relative received
- the skills and competencies of the staff
- their interaction with the staff
- the ED environment
- their satisfaction with the ED experience

Table 4.11: Semi-structured interview prompts for staff

- their experience of working in ED
- their role
- the skills and competencies of staff
- relationships with staff inside both and outside the department
- the ED care environment
- what they felt about the care patients received

In addition, staff were asked for their views on two findings from stage one of: the organisation not recognising, celebrating and rewarding their successes; and that the ED care environment did not impact on how care was delivered. As interviews progressed it became apparent that some participants' experiences contrasted with findings from stage 1. These specific issues were explored in greater detail in subsequent interviews.

A range of strategies were used during the interview to aid its flow. Introductions and explanations were given and the participants asked if they had any questions in an attempt to create a relaxed environment where they felt at ease (Turner 2010). Open-ended questions were used to allow the participant to respond in their own words in a narrative fashion, to give a rich and full perspective of their experience (Polit and Beck 2012). In addition, the researcher endeavoured to use sensitive questioning and portray interest with body language and eye contact (Tod 2006; Turner 2010). Various probing techniques were used in order to prompt the participant to give more information or detail. These included what Frey and Oishi (1995) term as silent probes: the use of silence, and uh-huh probes: the use of affirmative noises. Where necessary, probing questions were used to follow-up on responses to gain optimum information (Turner 2010). In addition, where information or statements were ambiguous or not understood clarification was sought.

4.7.5 Data analysis

Qualitative data analysis is undertaken to organise, provide structure and elicit meaning from the data and put these segments together into meaningful conceptual patterns (Polit and Beck 2012). The literature reveals there are multiple approaches to qualitative data analysis, however, there are two broad overarching approaches of deductive and inductive data analysis (Braun and Clarke 2006; Burnard et al. 2008).

In deductive data analysis a predetermined framework is used to analyse the data, however, Burnard et al. (2008) state that while this approach is quick and easy it has the potential to bias the analysis and can severely limit theme and theory development. In contrast, in inductive or theoretical data analysis the themes are derived from, and therefore strongly linked to, the data itself (Braun and Clarke 2006). According to Burnard et al. (2008), this is the most comprehensive approach and while it is time-consuming it is most suitable when there is little known about the phenomenon under study.

Many of the analytical approaches in use are connected to the theoretical or epistemological position of the study. Braun and Clarke (2006, p78) state that thematic analysis is not bound to any one position in particular and therefore it is flexible and can be applied *'across a range of theoretical and epistemological approaches'*. They present their framework as an adaptable and useful data analysis tool with the potential to provide a rich and detailed account of data. This made it a suitable framework to modify for mixed methods data analysis. The stage two interviews were transcribed verbatim and analysed using thematic analysis guidelines following an adapted version of the framework proposed by Braun and Clarke (2006).

1. In phase one the transcribed scripts were checked for accuracy with the recordings. Preliminary ideas were also noted about the potential codes in the data.
2. The second phase involved reading all the transcripts as often as required and generating initial codes. NVivo 10 was used to aid data management and as each transcript was read the codes were populated with data and new codes were created as required. NVivo was useful as a storage area for the data and codes and meant that the origins of the coded sections could be clearly identified with the facility to link directly back to the original source and context

if required (Macer 2008; Sage 2014). The programme allowed flexibility as text could be assigned to multiple codes, new codes created and existing codes merged, revised or deleted as required (Sage 2014). Care however needed to be taken that the data was not over-dissected, and that each could still be interpreted in relation to the preceding question or remark, so its context was not lost. In addition, training and practice was required in its use (Macer 2008; Sage 2014).

3. The third phase involved collating the codes into themes. This phase was divided into two stages of inductive and deductive analysis to address the objectives of the research. The qualitative aspect of the study was designed in part to address the second objective of the study which explored how the relationships between the components of person-centredness were experienced by staff and service users. For this an inductive approach to data analysis was used where the themes found were linked strongly to the data and the data was analysed without trying to fit it into a pre-existing coding frame (Braun and Clarke 2006). This ensured that the breadth of staff and service users' experiences were captured as reported. In inductive analysis themes do not *'emerge'* from the data (p 80), rather it is we as researchers who actively search for and choose them (Braun and Clarke 2006). It was important therefore to be open about how these were selected. Since the research aim was to explore person-centredness in EDs, themes were selected for their significance in relation to person-centredness. The second purpose of the qualitative aspect of the study was to illuminate or explain findings from stage one. To address this, staff were asked for their views on the findings that the organisation did not recognise, celebrate and reward their successes; and that the ED care environment did not impact on how care was delivered there. Analysis of these required a deductive or theoretical thematic analysis which involved searching for specific aspects relating to these in the

transcripts (Braun and Clarke 2006). This data was then incorporated into the relevant codes in NVivo. To aid developing the themes these codes were written onto coloured post-its (pink for staff data and orange for service users' data) and transferred onto flip chart paper. From there they could be moved into groupings to create themes, which could be easily rearranged and modified as the theming process progressed. Appendix 16 depicts this theming process.

4. In phase four the themes were checked for accuracy against the coded extracts for the entire datasets. Following this the themes were reviewed and refined and names generated which accurately reflected the essence of each theme. Care was taken to use labels that reflected what was found in the data.
5. Phase five involved writing up the qualitative findings to tell the story of the data. Extracts from the data were included to support the development of the themes and demonstrate a clear audit trail.

4.8 Integration of the datasets

Integration of the analysis from the quantitative and qualitative stages was undertaken using what O'Cathain et al. (2010) term as the triangulation protocol where the findings from each stage are represented on one page and examined to see where there are convergences, apparent divergences, complementary information or silences. Appendix 17 shows how this was achieved. O'Cathain et al. (2010) highlights how searching for divergence between findings from each stage is an important part of this process as is not a sign that something is wrong, rather it should lead to a better understanding. Additionally, she states this technique is the only one to consider silences which may lead to increased understanding or prompt the need for further investigation. This led to the development of meta-themes or key findings that cut across the findings from both datasets which according to O'Cathain et al.

(2010) gives the process of integration credibility and works well within the pragmatic stance of a mixed methods study. The findings from the integration of the datasets are presented in chapter 10.

4.9 Ensuring rigour in the study

It is commonly acknowledged that research studies must be open to critique and evaluation in order to assess the soundness of method, accuracy of the findings and the integrity of the assumptions made or conclusions reached (Long and Johnson 2000). DeVon et al. (2007) and Polit and Beck (2012) state that validity or quality is not an absolute; rather it is a matter of degree. They discuss how the validity of design elements of a study profoundly affects the inferences that can be made from it, therefore rigour must be incorporated at all stages so threats to it are minimised where possible (Onwuegbuzie 2000).

The issue of rigour in mixed methods appears to be an area of much debate. A number of authors (Dellinger and Leech 2007; Bryman et al. 2008; O'Cathain 2010) note how some mixed methods researchers use individual criteria to assess the rigour of the quantitative and qualitative components of the study separately. According to Creswell and Plano Clark (2007) these established approaches should not be underestimated since data is being collected and analysed from both quantitative and qualitative methods. Indeed, many researchers recommend the use of standard procedures for both stages of the study (Onwuegbuzie and Johnson 2006; Dellinger and Leech 2007; Creswell 2009). O'Cathain (2010) however highlights how the application of separate criteria for each part ignores the fact that there is more to a mixed methods study than the sum of its parts, as inferences should be drawn from an entire mixed methods study, not merely its constituent parts. Bryman et al. (2008) and Dillinger and Leech (2007) also found that some apply the same criteria to the

qualitative aspects of the study as for the quantitative stage. O'Cathain (2010) also notes the use of generic criteria for the assessment of all methodologies including mixed methods research, however, she states that these are too generalist to be applicable for all, and they do not account for the fact that there are quality issues specific to mixed methods.

A number of researchers feel that there is a separate set of expectations beyond those for quantitative and qualitative studies alone that need to be considered for mixed methods research (Bryman 2008; Creswell and Plano-Clark 2011; Tashakkori and Teddlie 2009). In addition, O'Cathain (2010) highlights how key issues such as the language of quality, the paradigm the research is undertaken within and the research design adopted, need to be considered when viewing quality. A language for mixed methods studies has emerged in an attempt to move away from traditional qualitative and quantitative specific terms (Teddlie and Tashakkori 2010; O'Cathain 2010; Creswell 2010). This also applies to the assessment of the quality of mixed methods studies, and O'Cathain (2010) notes the use of a number of expressions such as validity, inference quality, legitimisation and rigour. O'Cathain (2010) suggests however that the simple term *'quality'* is useful and consistent to use when assessing the merit of a mixed methods study (p538).

Several frameworks have been drawn up for the purpose of assessing various aspects of quality in mixed methods studies, for example Sale and Brazil (2004), Creswell and Plano-Clark (2007), O'Cathain et al. (2008) and Tashakkori and Teddlie (2008). O'Cathain (2010) drew together six quality frameworks into a single comprehensive one with Tashakkori and Teddlie's (2008) framework at its core. It is comprised of eight domains designed to assess the overall quality of a mixed methods study. O'Cathain (2010) admits, however, that this framework is in the early stages and may be further developed in the future. She further acknowledges that applying

this framework to a study is difficult and that while cumbersome, many researchers still argue that any mixed methods study must include separate appraisal of the quality of each component; quantitative, qualitative and mixed methods. The researcher struggled to slot the information into the prescribed domains effectively without it appearing disjointed and repetitive. As a result, it was decided to evaluate rigour in the quantitative and qualitative stages independently and the remaining aspects, which were unique to a mixed methods study, were then appraised in relation to the overall study. O'Cathain (2010) states there is a need to identify the relevant criteria within the framework, and how these criteria have been applied to the current study is seen in Appendix 15.

4.9.1 Rigour in the quantitative stage

In quantitative research, rigour focuses on the validity and reliability of the study. Shadish et al. (2002) refer to the seminal work of Campbell and Stanley (1963) and Cook and Campbell (1979) of threats to internal and external validity. They developed a validity taxonomy comprised of four components of statistical conclusion validity, internal validity, construct validity and external validity. While this was initially composed for experimental designs Onwuegbuzie (2000) stresses that they should be assessed in all quantitative research studies and therefore those which are pertinent to a descriptive study were considered here.

Statistical conclusion validity

Some interpret statistical conclusion validity literally to mean concern around making Type-I and Type-II errors, however, according to García-Pérez (2012), it goes beyond this to actually refer to the degree to which conclusions from the research are based on an adequate analysis of the data or the use of adequate statistical methods. Threats to this include having low statistical power and violated assumptions of the

test statistics. Low statistical power reduces the ability to detect true relationships among variables and involves the use of inadequate sample size and inaccurate measuring tools (Polit and Beck 2012). Efforts to control for Type-I and Type-II errors in this study due to sample size were addressed through the use of a sufficiently large sample and is documented in section 4.6.1. Polit and Beck (2012) also highlight the need to maximise statistical power through the use of accurate measuring tools and powerful statistical methods. Descriptive and inferential statistics were used in the analysis process of the quantitative phase of this study following an assessment of normality, as normally distributed data is an underlying assumption in parametric testing (Pallant 2013; García-Pérez 2012). García-Pérez (2012), however, highlights that serious consequences for statistical conclusion validity can arise following this, as a two-stage approach of testing assumptions before statistical analysis can result in complex interactions of Type-I and Type-II errors. However, García-Pérez (2012) acknowledges that not testing assumptions prior to analysis could mean the application of inappropriate non-robust statistical tests which would also threaten statistical conclusion validity. There appears to be a general consensus that the robust approach to analysis involves the use of testing for violations of assumptions prior to the selection of appropriate tests for statistical analysis (Field 2009; Polit and Beck 2012; Pallant 2013). This can be seen in section 4.6.5 of this chapter.

Internal validity

Internal validity concerns the degree to which the results would be exactly the same if the study was replicated using the same sample, setting, context, and time (Onwuegbuzie 2000). Relevant threats to internal validity include selection bias and history. According to and Polit and Beck (2012) selection bias is one of the most common and problematic internal validity threats to any non-experimental quantitative study and according to Onwuegbuzie (2000), always exists. This also holds true for self-selection as people with certain cognitive, affective or personality characteristics

or demographic variables may be more motivated than others to self-select for participation in a study. This means that while the findings reflect the views of someone with these characteristics, they may not necessarily be reflective of all the sample population (Polit and Beck 2012) and therefore may be biased. The threat of history on internal validity is recognised as the occurrence of events or conditions that are unrelated to the area of study, but that occur at that time and can produce changes in the outcome (Polit and Beck 2012). The threats to internal validity were recognised by the researcher. It was anticipated that the assurance of anonymity would encourage staff with a broad range of characteristics to participate in the study. The fact, however, that the quantitative aspect of the study was anonymous and few demographic variables were assessed makes it difficult to establish the degree of selection bias in the study. In addition, there is no data available on the demographic profile of ED staff in the sample population with which to compare the sample. To reduce the potential threat of history on internal validity the quantitative aspect of the study was conducted within a six week time frame during early summer where historically excessive demands on EDs such as winter pressures were not a feature.

Construct validity

Construct validity relates to whether an instrument actually measures the underlying theoretical domains it is designed to (McLeod 2007), and is the third area where Shadish et al. (2002) identified threats to validity. According to Polit and Beck (2012), it is a key criterion for assessing the quality of a study. Construct validity is supported if the scores obtained in the study reflect the theoretical framework as hypothesised, and confirmatory factor analysis (CFA) was used as a psychometric test to validate the extent to which the statistical model 'fitted' the actual data (DeVon et al. 2007; Furr 2011). Chapter 5 details how CFA was used to validate the extent to which the items of the PCPI-S actually reflected or fit the theoretical latent constructs they were designed to measure (Waltz et al. 2005; Wang and Wang 2012). CFA is theoretically

driven allowing confirmation or rejection of the theoretical underpinning (Wang and Wang 2012) of the PCPF (McCormack and McCance 2010).

Polit and Beck (2012) state that the more abstract the concept the more difficult it is to assess construct validity and the less suitable it is to rely on criterion-related validity. They concede, however, that if strong steps have been taken to ensure content validity of the instrument, this will also strengthen construct validity. Content validity is concerned with whether the instrument has an appropriate range of items for the construct being measured and whether they adequately cover the whole domain (Polit and Beck 2012). They state that out of necessity, this is based on judgement as there are no totally objective measures with which to assess this, therefore it is common to use a panel of experts. As previously noted the 59 items comprising the PCPI-S used in this study were derived directly from the Person-centred Practice Theoretical Framework using the Delphi technique with a range of national and international expert partners to ensure content validity of the tool (Slater et al. 2017). Two further threats to construct validity were highlighted by Polit and Beck (2012) of reactivity to the study and researcher expectations effects. Anonymity was also used in an attempt to reduce the threat of reactivity by participants, which Onwuegbuzie (2000) refers to as the changes in how individuals respond as a direct result of their participation in a research study. It was felt that anonymity would encourage staff to reply truthfully in their responses and allay any fears they may have about reporting negative aspects of their practice. Similarly, researcher bias could influence responses through communication to staff of desired outcomes or values of the researcher (Onwuegbuzie 2000). Care was taken in visits to the work area to promote awareness of the research to discuss the project without indication of any desired outcome to reduce this threat to construct validity.

External validity

The final of Shadish et al.'s (2002) threats to validity is that of external validation which refers to the extent to which the results would replicate across different populations of persons, settings, contexts, and times (Onwuegbuzie 2000). The main factor in external validity refers to the population validity and its representativeness. The use of large random samples increases the external validity of the results by increasing the likelihood of the sample being more representative of the population (Onwuegbuzie 2000). As explained earlier, a sufficiently large sample was obtained for power calculations and as can be seen in Chapter 6 a range of the possible professions, bands and sites were represented in the data. Polit and Beck (2012) highlight how the use of multiple sites enhances external validity as there is more confidence in the generalisability of the results.

The degree of non-response in a survey can lead to bias due to under or over-representation of specific groups (Bethlehem 2009). Correction for non-response bias is possible by undertaking weighting adjustment (Bethlehem 2009). This is only possible however, if auxiliary variables relating to relevant demographics are available, as this permits assessment of the representativeness of responders in relation to the entire sample population (Lavrakas 2008). A number of variables were collected in this survey relating to profession, size of department worked in, and years of clinical and ED experience. However, information to establish how representative these were of the ED staff population in general, was not available. Despite this, what could be seen from the demographics obtained was that there was a satisfactory range of staff relating to these variables among the participants.

Researcher bias and reactivity by participants has also been identified as a threat to generalisability by Onwuegbuzie (2000) and Polit and Beck (2012) and thereby external validity. Onwuegbuzie (2000) highlights how specificity of variables such as

time, context and particular conditions limit generalisability of results. In an effort to reduce this, the study was conducted in early summer after the extremes of winter pressures and prior to school holidays, both of which have the potential to alter the demographic presentations within an ED.

Reliability

The reliability of a quantitative instrument is an important quality indicator of a study (Polit and Beck 2012) and refers to its ability to measure the attribute under study consistently (DeVon et al. 2007; Ihantola and Kihn 2011). According to Pallant (2013), this relates to the degree to which all the scale items are measuring the same underlying construct. One of the most commonly used indicators of this is Cronbach's alpha coefficient. There have however, been many critics of Cronbach's alpha as a measure of reliability. Pallant (2013) states that Cronbach's alpha is sensitive to the number of items that comprise the scale and in short scales of fewer than ten items it is common to find low scores. Starkweather (2012) refers to the three core assumptions that Cronbach's alpha adopts: first, each item's observed score is the result of adding the item's true score and error; secondly, it presumes tau equivalence, which means that all items carry equal loadings and have the same amount of variance and thirdly, that it assumes uncorrelated error scores. Starkweather (2012) states that in most social science instruments the second assumption is violated and therefore testing reliability through Cronbach's alpha would lead to a biased estimation. Furr (2011) states that the limitations of Cronbach's alpha's have led to CFA being used as an alternative measure of a scale's reliability, which according to Byrne (2010) provides a better estimate of reliability. Hinkin (1995) states that CFA is able to examine the stability of the factor structure in scale construction thereby demonstrating that individual items are consistent in their measurements (Hair et al. 2010; Hafiz and Shaari 2013). CFA was used to examine the fit of the PCPI-S to the scale's responses. According to Hair et al. (2006), when multiple measurements are

taken, reliable measures will be consistent in their values. Chapter 5 reports the results where all were found to be within acceptable limits and the scale items loaded onto the relevant factor and did not require modifications, thereby confirming the reliability of the instrument.

4.9.2 Rigour in the qualitative stage

Several authors (Long and Johnson 2000; Hope and Waterman 2003; Rolfe 2006) describe a range of stances adopted around assessing the rigour of a qualitative study; first, that it is judged using the same criteria as quantitative research; secondly, that a different set of criteria should be applied; and thirdly, that it is questionable if it is appropriate to apply any predetermined criteria for judging qualitative research at all. Rolfe (2006) contends that since there is no one unified method, methodology or body of theory that represents qualitative research, it is difficult to establish a set of generic quality criteria, and that each methodology, or even study, should be judged on its own merit. While Porter (2007) accepts that it is impossible to construct a comprehensive list of criteria that is relevant to all approaches, he argues that procedures do need to be adopted which allow qualitative research rigour to be taken seriously. The literature frequently refers to Lincoln and Guba's (1985) four criteria of truth-value (credibility), applicability (transferability), consistency (dependability) and neutrality (confirmability), which they believed should be considered by qualitative researchers in pursuit of a trustworthy study (Golafshani 2003; Shenton 2004; Thomas and Magilvy 2011). They *"reclaimed ordinary language terms*" (Kvale 1996, p231) and replaced internal validity with credibility, external validity with transferability, reliability with dependability and objectivity with confirmability. A number of strategies have been identified to establish these criterion within a study which Creswell and Miller (2000) consider as quality judgements viewed either through the lens of the researcher, the study participants' or external people such as reviewers and readers.

The strategies which are relevant to the qualitative stage of this study are discussed below.

Credibility

The issue of credibility relates to internal validity in quantitative research (Thomas and Magilvy 2011). Krefting (1991, p.218) states:

> *"A qualitative study is considered credible when it presents an accurate description or interpretation of human experience that people who also share the same experience would immediately recognize."*

This involves ensuring that there is consistency between participants' views and how they are represented (Schwandt 1996). Numerous strategies have been suggested to achieve this, however, the mainly cited ones are member checking and peer debriefing (McBrien 2008; Thomas and Magilvy 2011).

Guba and Lincoln (1989) consider that member checking is vital and the single most important technique to bolster a study's credibility, however many caution against an over reliance of this strategy as a means of ensuring credibility. Creswell and Miller (2000) identify this as a method where credibility is established by the study participants. Member checking involves returning to the interviewees to check that the interpretations the researcher has made are recognised by them as an accurate representation of their experiences (Porter 2007; Thomas and Magilvy 2011). There appears to be some debate however around what exactly should be verified with the participant. Shenton (2004) suggests that transcripts of participant's own dialogues be checked to ensure the words used match what was intended. Holloway and Wheeler (2002) and Marshall and Rossman (2016) state that a summary should be presented, and participants asked for their reactions and further insights. Some authors, however, go further to advise that analysis should take place in the field

during data collection, and the emerging theories should be checked with the participant at that time (Van Maanen 1983; Miles and Huberman 1994). This, however, would involve the participant having insight into the topic under study. Porter (2007) highlights how lay people may have neither the ability nor the interest to comment productively or act as a research validator, while Morse (2001) feels that participants may not have any research expertise and therefore dependence on member checking keeps data shallow and detracts from the value of the research. In addition, Long and Johnson (2000) highlight how significant elements of the raw data are derived from field notes and observations of verbal and non-verbal cues which are often unconscious and therefore not recognised, accepted or acknowledged by the participant. A further issue highlighted in the literature is that of timing and when the member checking should be undertaken. Shenton (2004) suggests it should be conducted at the time of interview, either during or directly after, while Long and Johnson (2000) consider that a time lapse between data collection and member checking provides evidence of stability of the findings. They also acknowledge however, there may also be an issue with participant memory or even an alteration in situations and views.

In peer review, the lens for establishing credibility is external to the study (Creswell and Miller 2000) and a number of methods are recorded in the literature. Shenton (2004) and Murphy and Yielder (2010) recommend the delivery of initial findings at conferences or through publication. Questions and observations from audiences allow for early appraisal of the work, which may enable the researcher to refine or strengthen the study in light of the comments made (Shenton 2004). Presenting the findings to interested groups also helps ensure that the emphasis remains focused on the relevance of the study (Long and Johnson 2000). The main process documented, however, involves the use of experienced researchers to review and discuss the coding process undertaken by the researcher (Thomas and. Magilvy

2011). According to Holloway and Wheeler (2002), this prevents inappropriate subjectivity of the researcher and protects against any attempt to fit interpretations that cannot be supported by the data. In addition, it prevents premature closure in the search for explanations and patterns contained within the data (Long and Johnson 2000). Peer review can be undertaken either independently, where both individuals separately code the data to hopefully arrive at the same theoretical explanation (McBrien 2008), or where the researcher presents their analysis, coding and subsequent interpretations with a peer researcher so they can challenge the assumptions and robustness of the themes generated (Marshall and Rossman 2016). According to Creswell and Miller (2000), this process is best used over the period of an entire study.

Critics of peer review however assert that it is unlikely that any two people will interpret the data in the same way. Morse (1994) states that any peer could never have the same direct involvement or familiarity with the data as the principal researcher and therefore would be less able to make judgements or ensure that adequate consideration has been given to all perspectives. Rolfe (2006) believes the process of peer review forces qualitative researchers to adopt a positivist approach by assuming that there are categories lodged within the data which an objective researcher has uncovered, and therefore an independent second analysis by another researcher will uncover the same. This highlights an epistemological debate around member checking and peer review. Qualitative research is an umbrella term for the many genres and subgenres of qualitative inquiry (Marshall and Rossman 2016) and therefore each approach views these strategies as a means of demonstrating validity differently. Sandelowski (1993) argued that since in qualitative research reality is assumed to be multiple and constructed, therefore it should not be expected that researchers and participants would agree the same themes and categories. According to Rolfe (2006) and Porter (2007), Sandelowski's (1993) view of member

checking and peer review regards them as a means of forced or artificial consensus both between researchers and participants and researchers and *"does violence to the multiplicity of reality"* (Porter 2007, p 84). Conversely Marshall and Rossman (2016) highlight that in a transformational approach it is imperative that the participants' voices are represented transparently as the end desired result is social justice or empowerment and therefore processes such as member checking ensures accuracy.

Aspects of both member checking and peer review were used in this study. The researcher approached a sample of participants, two staff and three service users, to review the transcripts of their interviews. This was done after transcription and prior to analysis and coding, as in agreement with Van Maanen (1983), Miles and Huberman (1994) and Porter (2007), the researcher felt that the contributions of each participant was just one part of the larger picture, and therefore it would be unreasonable to expect them to comment constructively on emerging themes. All participants were happy that the transcripts reflected a true and accurate reflection of what they had said.

Peer review was undertaken in a number of ways using a selection of different groups of people. Findings from stage 1 of the study were summarised and a copy sent to all ED staff in the participating departments, prior to the commencement of stage 2. The researcher has presented the process undertaken, and the findings to both peers and interested parties at a number of national and international conferences. In addition, presentations were made as part of the assessment strategy for doctoral students which took place at three stages over the course of the study. Questions, comments and observations received from assessors and interested peers have led to the researcher making necessary modifications to strengthen the study. Peer review was also undertaken with both supervisors where coded data was discussed and challenged. Decisions regarding what could be considered as themes and their

contributing sub-themes were also considered as a group to ensure that these could be substantiated in the data. This requirement for the researcher to have to justify decisions made helped ensure the findings emerged from the data and were consistent with what the participants' said.

Transferability

Transferability refers to the degree to which findings from one study are applicable to other contexts or populations (Lincoln and Guba 1985), and is closely related to the concept of external validity in quantitative research (Kitto et al. 2008). Gomm et al. (2000) and Murphy and Yielder (2010) feel that the notion of transferability is not a goal of qualitative research and actually belittles the significance of contextual influences. However, Shenton (2004) states that the concept should not be immediately rejected, because if practitioners believe their contexts to be similar to those of the study they may consider the findings applicable. The difficulty arises in qualitative research where the samples are small making it difficult or impossible to establish if findings could be applicable to other times, settings, situations, and people (Shenton 2004). According to Shenton (2004) and Murphy and Yielder (2010), it is the reader who must determine how confident they are in transferring the results to their own environments as the researcher cannot know the contexts of all the readers. Lincoln and Guba (1985) state that the researcher should provide sufficient contextual information to allow transferability judgments to be made by others, however it is not their responsibility to provide an index of transferability. This raises the issue over the nature and extent of background information that should be offered, as factors which the researcher considers important may differ considerably from what the reader deems essential (Shenton 2004).

Some authors advise that the researcher should communicate aspects relating to the boundaries of the study such as data collection methods, timeframe, number of

participants and organisations, and geographical boundaries (Thomas and Magilvy 2011; Shenton 2004). These details are given for the qualitative stage of this study in section 8.1. Guba (1981) recommends that a full description of all the contextual factors that impinge on the phenomenon under investigation should be conveyed. Denzin (1989) however proposes a much richer context and detail be provided which can serve to locate individuals in specific situations, bring a relationship or an interaction alive, or provide a detailed account of how people feel. Thick description refers to a detailed description where patterns of cultural and social relationships are made explicit and are set in context (Holloway 1997). Its purpose is that it creates *"verisimilitude"* (Creswell and Miller 2000, p 129), and allows the reader to feel that they have, or could, experience the events described. Creswell and Miller (2000) view thick, rich description as a quality measure established through the lens of the reader studying a narrative account, and being transported into a setting or situation. This can be contrasted with thin description, which is a superficial account which lacks detail, and simply report facts (Denzin 1989). The researcher ensured that the analysis and reporting of the data provided thick description, and was supported with relevant extracts from the interviews, to give context to the narrative.

Dependability

Dependability in qualitative studies relates to the concept of reliability in quantitative studies (Shenton 2004; Thomas and Magilvy 2011) and is concerned with the stability of data over time (Guba and Lincoln 1989). According to Marshall and Rossman (2016), this is problematic due to the changing nature of the phenomena investigated in qualitative research. Long and Johnson (2000) state that rather than using synonyms, qualitative researchers should accept that reliability is unlikely to be a demonstrable strength of their work, due to the nature of the data and the sampling. Stenbacka (2001) agreed with this position and believes that the concept is irrelevant, and if reliability is used as a quality criterion of a qualitative study then that study is

"no good" (p 552). Shenton (2004) and Long and Johnson (2000) highlight there is an obvious correlation between dependability and replicability, Shenton (2004) states that this aspect is not desirable in qualitative research due to the changing nature of the phenomena under study. This is supported by Thomas and Magilvy (2011, p154) who stress that replication is not desirable suggesting that:

> *"…like a river, the water is not the same even if one's stance and perspective from the bank is from the same spot".*

Many authors however believe that qualitative researchers should be concerned with the reliability of their studies (Lincoln and Guba 1985; Patton 2002; Polit and Beck 2012). Long and Johnson (2000) state that at the centre of this is the concern that a study is undertaken in a consistent manner and is free from undue variation, which would influence the findings. This is achieved mainly through a robust audit trail (Murphy and Yielder 2010) where Creswell and Miller (2000) and Rolfe (2006) state the responsibility for establishing the quality of the study shifts externally and is judged through the lens of the reader. To this end Rolfe (2006, p309) states

> *"…it behoves researchers to leave a 'super' audit trail, recounting not only the rationale underpinning the research decisions taken en route, and the actual course of the research process…"*

Many authors detail what aspects should be included in the audit trail. Creswell and Miller (2000) state there should be sufficient information to judge if the findings are grounded in the data, the inferences are logical, the category structure is appropriate, the inquiry decisions and methodological shifts can be justified, the degree of researcher bias is explicit and what strategies were used for increasing credibility. While Long and Johnson (2000) state the purpose is to allow others to judge the worth of the study by comparing it with their own conclusions, McBrien (2008) highlights that

while readers may not share the same interpretation, they should be able to understand how it was reached and not arrive at contradictory conclusions given the context of the study.

An audit trail has been kept throughout each stage of the research process and recorded details of any methodological decisions made, in particular; how participants were selected, how the data was collected, how the data was analysed using a step-by-step adapted framework, how themes were reached and interpretations made. The content of this has been discussed and challenged at supervision sessions with the supervisory team. Appropriate participant quotes have been used that illustrate how each theme has derived from, and is grounded in the interview data.

Confirmability

Confirmability refers to objectivity or neutrality in quantitative research and is concerned with the degree to which the findings represent the voices of the participant and not the researcher's biases (Polit and Beck 2012). Thomas and Magilvy (2011) state that confirmability is established when credibility, transferability, and dependability have been confirmed. The main strategies for demonstrating this are the audit trail, as previously discussed, and the reflexivity of the researcher (Shenton 2004; Murphy and Yielder 2010; Thomas and Magilvy 2011). Reflexivity requires the researcher to be self-aware and actively acknowledge how their own actions and decisions will inevitably influence the phenomena being studied McBrien (2008). According to Shenton (2004), the reflective commentary should detail the beliefs underpinning decisions made about favouring one approach or method over another and reasons for reaching a particular conclusion, and the audit trail is critical to this. To address this, an on-going self-reflexive account was written of the researcher's own experiences, values and preconceptions. Since to some extent these are not always known to the researcher (McBrien 2008), group supervision was useful in

discussing, identifying and challenging these. The reflexivity of the researcher and how this may have influenced the study is addressed in sections 3.2 and 3.3 of the previous chapter.

4.9.3 Rigour in mixed methods

This section considers the aspects of rigour that have not been addressed in the previous two sections and addresses the quality of this mixed methods study in its ability to deliver more than its constituent parts (O'Cathain 2010). It follows the framework discussed in section 4.75. How these aspects relate to the study in its entirety can be seen in Appendix 15.

Planning quality

O'Cathain (2010) highlights the importance of planning as a quality issue in a mixed methods study. In her framework, planning includes the aspects of the foundational element, rationale transparency, planning transparency and the feasibility of the study. The foundational element refers to the researchers' understanding of the topic under study which requires a comprehensive, critical review of the theoretical and empirical literature (Dellinger and Leech 2007). This was undertaken over the course of the study. Findings from the initial literature review identified the gap in the research from which the current research question was formed. At this stage it was decided that in order to fully address the research question a mixed methods approach should be adopted. Plano Clark and Badiee (2010) highlight how the research question should dictate methodological decisions and mixed methods should only be used if it is required to address the research question. O'Cathain et al. (2008) note how it is particularly helpful for the subsequent quality assessment of a mixed methods study if researchers are explicit about the design, priority and dominance of the individual components of the study. The two-stage sequential explanatory research design, the

measurement tools and data analysis methods were decided on to address the question following the literature review, as recommended by Dellinger and Leech (2007). In addition, the literature was also used to inform and justify the choice of theoretical framework adopted, and the framing of the findings (Dellinger and Leech 2007). The feasibility of undertaking the study was assessed by, and received approval from the Office for Research Ethics Committee and trust governance in each of the five participating trusts in Northern Ireland. In addition, it was planned that the study would be supervised by experienced researchers and progress regularly assessed by university researchers.

Design quality

Design quality is one part of what Tashakkori and Teddlie (2009) term as inference quality which in quantitative and qualitative terms relates to internal validity and credibility respectively. Design quality relates to the standards that are used to evaluate the methodological rigor of the mixed methods research (Ihantola and Kihn 2011). It consists of four components of design transparency, design suitability, design strength and design rigour. This means that the research design should be from a known typology where possible, be appropriate for the research question and paradigm, minimise bias and optimise the breadth and depth of the study, and be implemented according to any design-specific recommendations (O'Cathain 2010). To address the research question, the qualitative component of the study needed to follow the quantitative stage for the purposes of development and expansion, therefore a two-stage sequential explanatory design was required. Onwuegbuzie and Leech (2006) state that the research question should drive the choice of the specific mixed methods design employed, and Plano Clark and Badiee (2010) highlight how this fits well within the pragmatic approach. Design rigour was ensured as the methods were implemented in keeping with the proposed design with the quantitative stage preceding the qualitative stage. Design strength was addressed through the

use of a survey and semi-structured interviews for reasons of complementarity and development, thereby examining different aspects of the same phenomenon and expanding the breadth and depth of the study.

Data quality

Data quality is the third domain of O'Cathain's (2010) framework and is concerned with data collection and analysis which relates to data transparency, data rigour or design fidelity, sampling adequacy, analyst adequacy and analytic integration rigour. Transparency is a quality aspect that is common to many of the sections in the framework and refers to the need to be explicit, clear, and open about the methods and procedures used (Hiles 2008). Data transparency is the extent to which the quantitative and qualitative stages are described in sufficient detail, including their role within the study. Bargaje (2011) highlights the importance of good documentation practice to ensure that the study results are built on the foundation of credible and valid data, while O'Cathain et al. (2008) states that a lack of data transparency makes it difficult to assess the other aspects of quality within a study. This methodology chapter clearly documents each of the stages of the study undertaken to ensure the reader can follow the process and assess the quality of the findings. Data rigour or design fidelity concerns the degree to which the design methods are implemented with rigour (Teddlie and Tashakkori 2009). For an explanatory design this refers to the degree to which the process allows for meaningful information to be obtained through the qualitative stage building on significant predictors highlighted from the quantitative stage (Creswell and Plano-Clark 2011). The data collection process remained true to the design with the second qualitative stage building on the quantitative stage and is detailed in section 4.4 of this chapter. Analytic adequacy rigour and analytic integration rigour is concerned with whether the data analysis techniques are appropriate and undertaken adequately, and whether the quality of the integration was acceptable. Data analysis of the stages is recorded in sections

4.6.5 and sections 4.7.5 and the findings from these are recorded in chapters 5, 6, 7 and 8. De Lisle (2011) states that a fundamental aspect of any mixed methods study is that integration be attempted at one or more stages, yet very few mixed methods studies achieve high levels of integration. In this study integration is seen where stage 1 findings inform the interview schedule and integration of the findings takes place at the interpretive stage.

Interpretive rigour

Interpretive rigour is the fourth domain of O'Cathain's (2010) framework and is concerned with the quality of the inferences that can be made from the study and whether they are trustworthy. These include interpretive transparency, interpretive consistency, interpretive theoretical consistency, interpretive agreement, interpretive distinctiveness, interpretive efficacy, interpretive bias reduction and interpretive correspondence. Rigour in relation to this study has been discussed in detail for both the quantitative and qualitative aspects in sections 4.9.1 and 4.9.2, however interpretive transparency and interpretive efficacy are specific to mixed methods studies. Interpretive transparency relates to the degree to which the reader can discern which results come from each component (Morse 2010) as this is required to make links between data quality and inferences (O'Cathain 2010). Care has been taken in the writing up of the integrated findings in chapter 9 to ensure there was clarity as to which results related to which stage of the study. Integrative efficacy is unique to mixed-methods studies and is the degree to which inferences made in each component of the mixed methods study are effectively integrated into a meta-inference (Ihantola and Kihn 2011). Creswell and Plano-Clark (2011) highlight how for an explanatory design this means that the follow-up qualitative data should provide a better understanding of the phenomena than simply the quantitative results alone. De Lisle (2011) highlights a number of ways that the findings from each component can complement each other and be integrated to form meta-inferences. These are

initiating, where findings are revealed in only one aspect of the study, conflicting, confirming or complementary or explanatory and expansion. Teddlie and Tashakkori (2009) and De Lisle (2011) highlight how when quantitative and qualitative components capture different aspects of the same phenomenon there may be conflict between the findings from each component. Within this study the qualitative aspect has a purpose of enlightening the findings from the quantitative stage, but also expanding on them to examine staff and service users' experiences of ED.

Inference transferability

Inference transferability relates to the degree to which the findings can be transferred to other settings, and corresponds with external validity in quantitative terms and transferability in qualitative terms (Teddlie and Tashakkori 2009). It consists of four components: population transferability - to other individuals or groups; ecological transferability - to other contexts and settings; temporal transferability - to other time periods, and operational transferability - to other methods of measuring the variables. Inferences can be drawn from each aspect of the study (Teddlie and Tashakkori 2009) and issues concerning the inference transferability relating to the quantitative (external validity) and qualitative (transferability) stages of the study have been discussed in sections 4.9.1 and 4.9.2. Mixed methods studies however should also communicate any meta-inferences gleaned from the study in its entirety (Teddlie and Tashakkori 2009; Ihantola and Kihn 2011) and this can be found in chapter 9.

Reporting quality

The 6th domain in the framework relates to quality in the dissemination of the findings, in particular, regarding the availability, transparency and evidence of yield in the report (O'Cathain 2010). 'Yield' refers to the degree to which a mixed methods study can provide knowledge and insights that cannot be obtained from a qualitative and quantitative study undertaken separately, and is discussed in greater detail below

(O'Cathain et al. 2007, p147). As previously discussed Rolfe (2006) and Creswell and Miller (2000) state that it is the readers of the research report who judge whether a study is trustworthy or not. This thesis has been peer reviewed by the researcher's supervisors and is available in the Ulster University library on completion of the study. In addition, the literature review has been published in a peer reviewed journal and other papers are being developed. O'Cathain et al. (2008, p97) developed guidance on "Good Reporting of a Mixed Methods Study" (GRAMMS). This guidance recommended transparency in the design and the individual components in the context of the design, and evidencing where the integration of the findings from the qualitative and quantitative methods took place. A GRAMMS checklist for this study is contained in Appendix 15.

Creswell et al. (2004) refer to the unique contribution of knowledge that is produced though a mixed methods study that is unavailable through a qualitative and a quantitative study undertaken independently, or yield (O'Cathain et al. 2007). O'Cathain et al. (2007) states that the two indicators of this yield are the degree to which researchers exploit the potential for integration; and the way in which this integration is communicated in peer reviewed journals. O'Cathain et al. (2007) encourages mixed methods researchers to maximise the potential for integration and highlights how this can take place at the design, sampling, analysis, and interpretation stages of the study. Integration at the various stages in this study is detailed in section 4.4 of this chapter, while chapter 9 provides evidence of how the integration of the findings and the subsequent 'yield' have been documented, which will be conveyed in future publications.

Domains 7 and 8 refer to the synthesisability and utility of the study and relates to its worth for inclusion in an evidence synthesis and use for policy makers. Since this is

beyond the scope of this research these domains are yet to be determined and were not included in this quality assessment for mixed methods studies.

4.10 Ethical considerations

Rigorous research must include an explicit discussion of the principles and practice of ethical issues surrounding the research setting and the participant's sensitivities. (Marshall and Rossman 2016). The main ethical principles of non-maleficence, beneficence, autonomy and justice (Beauchamp and Childress 2001), with strategies to address each were considered in relation to this study.

Non-maleficence

The principle of non-maleficence is concerned with doing no harm (Watson et al. 2008). The strategies planned by the researcher to ensure this included measures to prevent or support participant distress, reporting of poor or dangerous practice, anonymity and confidentiality and measures to ensure adequate data protection and storage.

There is a need for interviewers to be aware of the potential for psychological harm, which may be subtle requiring close attention and sensitivity, as in-depth probing may expose previously repressed issues (Polit and Beck 2012). During this study participants were asked about their experiences of either working or being a patient or relative in ED. It was considered therefore that there was a potential for participants to become distressed during their interview, especially if it they were relating a traumatic event that they or someone close to them had experienced. Watson et al. (2008) highlight how when there is the potential to cause distress in a study that there is a moral imperative on the researcher to minimise and manage this. In the event of a participant becoming distressed the researcher checked whether they wished to

continue with the interview, or if they wished it to be postponed or terminated. If required, the researcher then directed the interviewee to an appropriate source of support such as a member of the health care team for service users or Occupational Health for staff to discuss issues further.

There was also the potential for staff or service users to intentionally or inadvertently disclose poor or dangerous practice. In this event the interviewer would be required to liaise with the senior manager from that area in order for the appropriate action to be taken. These limits on confidentiality in such situations were clearly explained in the Participant Information Sheets given to staff and service users before their participation, and in addition this was repeated verbally by the researcher prior to commencing any interview. These can be seen in Appendices 8 and 12.

The principle of non-maleficence requires that the research involves the least number of participants possible to obtain valid data (Canterbury Christ Church University 2014). The power calculation determined that 250 participants were required for a total of 714 staff (section 4.6.1) for sufficient power. There is no consensus regarding typical response rates to surveys and rates reported ranged from 10-15% (Survey Gizmo 2015) to under 50% (Polit and Beck 2012). Therefore, in an attempt to ensure sufficient power all 714 staff were included. Stage 2 data collection remained open only as long as necessary for sufficient data to be collected and no new themes coming through were noted.

The ethical principle of non-maleficence also applies to the collection, storage, protection and dissemination of the collected data (Watson et al. 2008). To ensure privacy all face-to face interviews were conducted in a private quiet location. For interviews conducted in participants' own home the researcher adhered to the Lone Working procedure within the Ulster University Health and Safety Policy and

Procedures (Appendix 14). The questionnaire was anonymous and no identifiable data was collected. All interviews were confidential with only the researcher aware of the participant's name. Data collected included questionnaires, transcripts, recordings, field notes and the computer files created for data analysis. All data was stored on a password protected computer. Hard copies of data were stored in a locked filing cabinet in the researcher's office. The researcher and her supervisors were the only individuals that had access to any information or data in relation to the study. Since study completion, the researcher has adhered to the University of Ulster's Archiving Procedure for Research Data and all data has been stored securely at the University and will remain there for ten years before being deleted. During dissemination of the findings care was taken both in writing the thesis, publications and presentations that data remained confidential and no one was identifiable by their quotes or statements.

Beneficence

Beneficence and non-maleficence are often paired as the concepts are complementary, however while non-maleficence is passive, beneficence requires the active duty to do good (Watson et al. 2008). While this may not always be possible during the course of a study, Watson et al. (2008, p 132) acknowledge that there is a wider understanding that this may mean there is an overall *'good'* for the future or a wider population. Beneficence requires that it is the intention of the research to generate new knowledge that will benefit the participants or society as a whole, or advance knowledge (Canterbury Christ Church University 2014). This research has assisted in generating data that can be used to inform future development of person-centred practice, identify barriers to change, raise awareness of, and help promote an understanding of person-centred practice in EDs. This is significant as person-centred care has been demonstrated to transform care for staff and patients (McCormack and McCance 2010).

Autonomy

In research the ethical principle of autonomy relates to the acknowledgment of participants' rights, which include the right to be fully informed about the research, freely decide whether or not to participate, and the right to withdraw at any time without consequence (Orb et al. 2001). Strategies to ensure this include informed consent and voluntary participation. Polit and Beck (2012) state that in order to obtain fully informed consent the following must be communicated; research goals, type of data to be collected, procedures, nature of commitment, sponsorship, how they were selected, potential risks and benefits, confidentially assurance, voluntary consent, right to withdraw or withhold information and contact information. Care was taken in the composition of the Participant Information Sheets for staff and service users that all the necessary information was included, so an informed and voluntary decision could be made whether or not to participate.

Justice

Justice refers to a person's right to fair treatment (Orb et al. 2001). Polit and Beck (2012) state that strategies to address this principle include participant selection and the treatment of those who decline to participate or withdraw. In the quantitative stage all contracted ED staff were invited to participate. In addition, for the qualitative stage all staff and service users attending EDs during the study period were invited to participate thereby ensuring equity of access to the study. If service users whose first language was not English had contacted the researcher wishing to take part in an interview the researcher planned to include these persons, dependent on resources being available within the trust to provide interpreter services, however this situation did not arise. Staff and service users who declined to participate or withdraw were not discriminated against in any way. This information was conveyed to them in the Participant Information Sheets (Appendices 2, 8 and 12). Watson et al. (2008) state that justice also refers to data analysis. They warn that to *'cherry pick'* (p132)

particular elements for analysis and dissemination is not ethically sound, and while certain aspects may be presented for publication due to relevance at a particular time, all findings need to be included in the final reports. All findings have been reported in chapters 5, 6, 7 and 8. Figure 4.5 shows how each of the ethical principles apply to the strategies employed in this study.

On the basis of these principles ethical approval was granted from the Ulster University School of Nursing Research Ethics Committee, an NHS Research Ethics Committee (REC) and from each of the Health and Social Care Trusts where the study was conducted.

Figure 4.5: The application of ethical principles to this study (adapted from Watson et al. 2008)

4.11 Summary

This chapter has detailed the methodology of this study. It began by providing justification for the use of a mixed methods approach in meeting the objectives of the research, and highlighted how the research design employed addressed this. It discussed the sampling, data collection tools, data collection processes and analyses for both the qualitative and quantitative stages of the study. The importance of rigour in the study was addressed and strategies that were used to ensure this in the quantitative and qualitative stages were presented. Additional strategies to ensure rigour in a mixed methods study are required and these were discussed. Finally, ethical issues were considered and the strategies that were used to ensure the study was ethically sound presented.

CHAPTER 5: CONFIRMATORY FACTOR ANALYSIS

This chapter establishes the psychometric properties of the Person-centred Practice Inventory (Staff) (PCPI-S), which will ensure the integrity of the study findings and that conclusions reached from them are appropriate. This will include undertaking confirmatory factor analysis (CFA) which provides a statistical measure of the measurement model that will determine the fit between the 59 item PCPI-S and the data collected in ED, thereby providing confirmation of the questionnaire construct. Prior to this an overview of the response rate from the survey is presented.

5.1 Response rate

A total of 714 questionnaires were distributed to ED staff. This was comprised of 528 nurses and 186 doctors. In total 335 questionnaires were returned which equated to a 47% response rate. Of these 92 questionnaires were completed on-line and the remaining 243 were returned in hard copy. Of the 92 which were undertaken on-line, four participants logged on and opened the questionnaire, but did not complete any questions leaving the response rate at 46% (n = 331). Questionnaires were accepted for analysis if they had less than 20% of the responses missing as recommended by Hair et al. (2010). This equated to twelve questions. This left an effective response rate of 43%, (n = 308).

Individual response rates by profession were calculated. Doctors had a response rate of 27% (n = 50) and nurses 48% (n = 252). Six participants did not disclose their profession and therefore these were omitted from this calculation.

The following tests, each of which are explained below, were conducted on the data:

- the appropriateness of the correlation matrix for factor analysis was evaluated using the Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy
- the item scores were examined for skewness and kurtosis scores
- correlation scores were examined to assess their correlation with other items within the same domain
- analysis of the measurement model involved examining factor loadings to measure the relationship between the items and their associated construct and scrutiny of a number of fit indices to assess if the model's 'fit' is acceptable.

The tests were conducted on the PCPI-S as a whole, however, for ease of presentation and interpretation these findings are presented in three sections representing each of the three domains. Following this, findings from the CFA are presented for the PCPI-S.

According to DeVon et al. (2007), all rigorous research designs must use measurement tools that are psychometrically sound, and assessment and confirmation of the validity and reliability of the measurement tool used helps ensure this. Hamdan et al. (2011) state CFA is a reliable test of validity and reliability and recommend testing with CFA after data collection. Validity refers to the extent to which an instrument actually represents the concept of study while reliability relates to the extent to which an instrument is consistent in what it is intended to measure (Field 2009). CFA measures validity and reliability as it validates the extent to which a set of measured items actually reflect or fit the theoretical latent constructs they are designed to measure (Waltz et al. 2005; Wang and Wang 2012). CFA is theoretically driven in that the researcher specifies how many variables exist for each factor and which factor each variable loads onto, allowing confirmation or rejection of the

preconceived theory (Wang and Wang 2012). This determines the reliability of the questionnaire constructs based on the established theoretical framework as a reliable and valid measurement model that should be replicable across time and settings.

5.2 Bartlett's test of sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy

To assess the appropriateness of the correlation matrix for conducting a factor analysis the Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were used (Parlour et al. 2015). According to Pallant (2013), Bartlett's test of sphericity should be significant ($p < .05$) for the factor analysis to be considered appropriate and the KMO should have a minimum value of 0.6. The KMO value was found to be 0.906 and Bartlett's test of sphericity reached statistical significance (chi-square 9477.463, df1711, $p = 0.00$), supporting the factorabilty of the correlation matrix.

5.3 Skewness, kurtosis and correlation scores from the Prerequisites domain

The *Prerequisites* domain contains five constructs which in turn contain eighteen of the total PCPI-S items. For each item skewness, kurtosis and correlation scores are presented. Skewness and kurtosis provide information on the distribution of scores of the items (Pallant 2013). Skewness refers to the symmetry of the distribution of the most frequent scores. A skewed distribution can be positively skewed where most scores are clustered at the lower end, or negatively skewed where most scores are clustered at the higher end (Field 2009). Kurtosis refers to the how peaked the distributions are which is determined by the extent to which the responses are clustered in the tails of the distributions (Hair et al. 2010). Both have a value of zero in a normal distribution, however +/-2 is acceptable (Field 2009). Deviations from

skewness and kurtosis may have an impact on later analysis and therefore should be identified at this stage as an item that may require re-examination for inclusion in the final analysis.

Table 5.1 shows the kurtosis scores of items 1, 3, 6, 7, 8, 11 and 18 were high. In addition to having a high kurtosis score item 8 also has a large negatively skewed score indicating that the majority of responses were scored highly. As these scores are at item level and will be amalgamated to construct level, these are noted but no action taken at this stage. In addition, Tabachnick and Field (2007) in Pallant (2013, p57) state skewness and kurtosis will not make a considerable difference in the analysis of reasonably large samples of over 200 cases.

Table 5.1: PCPI-S: Skewness and kurtosis of the Prerequisites domain items

Item no.	PCPI-S: Prerequisites domain	Skewness	Kurtosis
	Professionally competent		
1	I have the necessary skills to negotiate care options.	-.867	2.882
2	When I provide care, I pay attention to more than the immediate physical task.	-.777	.751
3	I actively seek opportunities to extend my professional competence.	-1.095	2.976
	Developed interpersonal skills		
4	I ensure I hear and acknowledge others perspectives.	-.122	1.732
5	In my communication I demonstrate respect for others.	-.457	-.101
6	I use different communication techniques to find mutually agreed solutions.	-1.310	2.670
7	I pay attention to how my non-verbal cues impact on my engagement with others.	-1.152	4.424
	Being committed to the job		
8	I strive to deliver high quality care to people.	-2.531	8.345
9	I seek opportunities to get to know the person and their family in order to provide holistic care.	-.963	1.087
10	I go out of my way to spend time with people receiving care.	-.720	.313
11	I strive to deliver high quality care that is informed by evidence.	-1.678	5.662
12	I continuously look for opportunities to improve the care experiences.	-.637	1.432
	Knowing self		
13	I take time to explore why I react as I do in certain situations.	-.871	-.017
14	I use reflection to check out if my actions are consistent with my ways of being.	-.704	.328
15	I pay attention to how my life experiences influence my practice.	-.766	1.379
	Clarity of beliefs and values		
16	I actively seek feedback from others about my practice.	-.761	.511
17	I challenge colleagues when their practice is inconsistent with our team's shared values and beliefs.	-.752	.251
18	I support colleagues to develop their practice to reflect the team's shared values and beliefs.	-1.283	3.962

5.3.1 Prerequisite item correlation scores

The correlation scores between the items within each construct were assessed. Ideally each item should correlate highly with the construct it is theoretically associated with and weakly with all others (Gefen and Straub 2005). This ensures discriminant validity which measures the degree to which items that should not be related are in fact not (Trochim 2006b). Bivariate correlation analysis describes the strength and direction of the linear relationship between two variables (Pallant 2013). Correlations can be either positive or negative. A negative correlation exists when as the value of one variable increases, the other decreases. Values range from +1 to -1 with a score of 0 indicating no relationship between the variables and a score of +/-1 indicating a perfect correlation. A value of 0.7 - 1 is considered a strong correlation indicating factors with similarity, therefore values below 0.7 are desirable (Brace et al. 2013). At this stage highly correlated items were identified for modification later in the process if required, depending on the results of the fit statistics. Table 5.2 shows one pair of items; item 17 and item 18 were strongly correlated with each other with a correlation score of 0.7.

Table 5.2: Correlation between items in the Prerequisites domain

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	.347** n=308																
3	.266** n=306	.437** n=306															
4	.274** n=306	.528** n=306	.496** n=306														
5	.423** n=306	.408** n=306	.330** n=306	.351** n=306													
6	.491** n=308	.438** n=308	.269** n=306	.324** n=306	.386** n=306												
7	.351** n=308	.252** n=308	.187* n=306	.233* n=306	.364** n=306	.379** n=308											
8	.466** n-308	.363** n=308	.453** n=306	.393** n=306	.492** n=306	.181 n=308	.384** n=308										
9	.242** n=307	.464** n=307	.276** n=305	.300** n=305	.319** n=305	.235** n=307	.130 n=307	.510** n=307									
10	.355** n=308	.440** n=308	.223** n=306	.268** n=306	.249** n=306	.206** n=308	.183 n=308	.507** n=308	.768** n=307								
11	.237** n=308	.269** n=308	.530** n=306	.286** n=306	.331** n=306	.220* n=308	.107 n=308	.557** n=308	.345** n=307	.372** n=308							
12	.242** n=305	.530** n=305	.477** n=305	.520** n=305	.375** n=305	.368** n=305	.158 n=305	.387** n=305	.393** n=304	.464** n=305	.364** n=305						
13	.118** n=308	.266** n=308	.131** n=306	.226 n=306	.260** n=306	.513** n=308	.377** n=308	.124 n=308	.137* n=307	.198** n=308	.122* n=308	.289** n=305					
14	.284** n=308	.392** n=308	.351** n=306	.348** n=306	.352** n=306	.344** n=308	.277** n=308	.400** n=308	.335** n=307	.351** n=308	.303** n=308	.379** n=305	.490** n=308				
15	.303** n=308	.441** n=308	.392** n=306	.384** n=306	.405** n=306	.307** n=308	.365** n=308	.466** n=308	.364** n=307	.378** n=308	.380** n=308	.297** n=305	.262** n=308	.474** n=308			
16	.272** n=308	.186** n=308	.453** n=306	.242** n=306	.117 n=306	.354** n=308	.135 n=308	.263** n=308	.279** n=307	.274** n=308	.321** n=308	.307** n=305	.332** n=308	.378** n=308	.292** n=308		
17	.398** n=308	.292** n=308	.188* n=306	.203* n=306	.230** n=306	.449** n=308	.183* n=308	.171 n=308	.257** n=307	.299** n=308	.220* n=308	.270** n=305	.245** n=308	.281** n=308	.243** n=308	.394** n=308	
18	.477** n=308	.289** n=308	.274** n=306	.293** n=306	.326** n=306	.460** n=308	.193* n=308	.370** n=308	.337** n=307	.380** n=308	.382** n=308	.435** n=305	.211** n=308	.353** n=308	.266** n=308	.398** n=308	.700** n=308

** Correlation is significant at the 0.01 level (2-tailed) * Correlation is significant at the 0.05 level (2-tailed)

5.4 Skewness, kurtosis and correlation scores from the Care Environment domain

The scores were calculated for the items contained within the *Care Environment* domain. As shown in Table 5.3, the skewness values reveal that all the items were within the +/- 2 range with most falling below +/- 1. Five of the items: 19, 21, 29, 30 and 36 reveal kurtosis scores which exceed +/- 2, however each of these had skewness scores which were satisfactory. Again, the fact that these scores were at item level was noted and no action taken at this stage.

Table 5.3: PCPI-S: Skewness and kurtosis of the Care Environment domain items

Item no.	PCPI-S: Care Environment domain	Skewness	Kurtosis
	Skill mix		
19	I recognise when there is a deficit in knowledge and skills in the team and its impact on care delivery.	-1.285	4.689
20	I am able to make the case when skill mix falls below acceptable levels.	-.401	-.789
21	I value the input from all team members and their contributions to care.	-.862	3.071
	Shared decision-making systems		
22	I actively participate in team meetings to inform my decision-making.	-.791	.102
23	I participate in organisation-wide decision-making forums that impact on practice.	.215	-1.111
24	I am able to access opportunities to actively participate in influencing decisions in my directorate/division.	-.142	-1.009
25	My opinion is sought in clinical decision-making forums (e.g. ward rounds, case conferences, discharge planning).	-.341	-.943
	Effective staff relationships		
26	I work in a team that values my contribution to person-centred care.	-.813	.130
27	I work in a team that encourages everyone's contribution to person-centred care.	-.636	-.257
28	My colleagues positively role model the development of effective relationships.	-.789	.166

Item no.	PCPI-S: Care Environment domain	Skewness	Kurtosis
	Power sharing		
29	The contribution of colleagues is recognised and acknowledged.	-.748	3.70
30	I actively contribute to the development of shared goals.	-1.403	2.381
31	The leader facilitates participation.	-.742	-.157
32	I am encouraged and supported to lead developments in practice.	-.211	-.876
	Potential for innovation and risk taking		
33	I am supported to do things differently to improve my practice.	-.446	-.572
34	I am able to balance the use of evidence with taking risks.	-.792	.378
35	I am committed to enhancing care by challenging practice.	-.766	1.281
	The physical environment		
36	I pay attention to the impact of the physical environment on people's dignity.	-1.057	3.340
37	I challenge others to consider how different elements of the physical environment impact on person-centredness.	-.588	-.019
38	I seek out creative ways of improving the physical environment.	-.778	.964
	Supportive organisational systems		
39	In my team we take time to celebrate our achievements.	.501	-.607
40	My organisation recognises and rewards success.	.405	-.668
41	I am recognised for the contribution that I make to people having a good experience of care.	-.232	-1.185
42	I am supported to express concerns about an aspect of care.	-.489	-.786
43	I have the opportunity to discuss my practice and professional development on a regular basis.	.212	-1.018

5.4.1 Care environment item correlations scores

The correlation scores of the items contained within the *Care Environment* domain were examined. A negative correlation was noted between four pairs of items; 19 – 39, 19 – 40, 19 – 41 and 35 – 41. The remainder are all positively correlated. There were strong positive correlations above 0.7 between the following items; items 25 – 26, 26 – 27, 26 – 28, 27 – 28, 26 – 29, 27 – 29 and 39 – 40. These are all highlighted in Table 5.4 for ease of reference.

Table 5.4: Correlation between items in the Care Environment domain

	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
20	.232** n=308																							
21	.416** n=308	.088** n=308																						
22	.399** n=308	.303** n=308	.280** n=308																					
23	.132 n=308	.404** n=308	.052 n=308	.443** n=308																				
24	.375** n=308	.389** n=308	.192* n=308	.597** =308	.609** n=308																			
25	.312** n=308	.408** =308	.158* n=308	.465** n=308	.543** n=308	.612** n=308																		
26	.182* n=308	.360** n=308	.252** n=308	.390** n=308	.414** n=308	.548** n=308	.719** n=308																	
27	.194* n=308	.342** n=308	.291** n=308	.397** n=308	.371** n=308	.534** n=308	.619** n=308	.917** n=308																
28	.106 n=308	.233** n=308	.276** n=308	.415** n=308	.342** n=308	.420** n=308	.492** n=308	.716** n=308	.744** n=308															
29	.091 n=308	.281** n=308	.241** n=308	.371** n=308	.284** n=308	.491** n=308	.480** n=308	.731** n=308	.779** n=308	.601** n=308														
30	.281** n=308	.239** n=308	.431** n=308	.557** n=308	.335** n=308	.558** n=308	.535** n=308	.515** n=308	.497** n=308	.440** n=308	.571** n=308													
31	.069 n=308	.263** n=308	.285** n=308	.386** n=308	.310** n=308	.475** n=308	.413** n=308	.553** n=308	.600** n=308	.492** n=308	.612** n=308	.495** n=308												
32	.077 n=308	.362** n=308	.144 n=308	.326** n=308	.537** n=308	.606** n=308	.582** n=308	.628** n=308	.613** n=308	.513** n=308	.513** n=308	.500** n=308	.532** n=308											

33	.089 n= 308	.319 ** n= 308	.302 ** n= 308	.385 ** n= 308	.371 ** n= 308	.504 ** n= 308	.500 ** n= 308	.604 ** n= 308	.617 ** n= 308	.576 ** n= 308	.571 ** n= 308	.444 ** n= 308	.601 ** n= 308	.586 ** n= 308									
34	.350 ** n= 308	.290 ** n= 308	.213 * n= 308	.235 ** n= 308	.233 ** n= 308	.233 ** n= 308	.424 ** n= 308	.312 ** n= 308	.273 ** n= 308	.188 ** n= 308	.225 ** n= 308	.300 ** n= 308	.107 n= 308	.346 ** n= 308	.347 ** n= 308								
35	.380 ** n= 308	.136 n= 308	.285 ** n= 308	.397 ** n= 308	.207 ** n= 308	.305 ** n= 308	.284 ** n= 308	.228 ** n= 308	.155 * n= 308	.186 ** n= 308	.200 ** n= 308	.370 ** n= 308	.084 n= 308	.266 ** n= 308	.305 ** n= 308	.539 ** n= 308							
36	.362 ** n= 308	.154 * n=308	.448 ** n= 308	.295 ** n= 308	.163 n= 308	.377 ** n= 308	.260 ** n= 308	.266 ** n= 308	.318 ** n= 308	.161 * n= 308	.339 ** n= 308	.417 ** n= 308	.192 * n= 308	.321 ** n= 308	.194 * n= 308	.160 * n= 308	.432 ** n= 308						
37	.130 n= 308	.205 ** n= 308	.100 n= 308	.316 ** n= 308	.380 ** n= 308	.420 ** n= 308	.351 ** n= 308	.224 ** n= 308	.218 ** n= 308	.220 ** n= 308	.220 ** n= 308	.274 ** n= 308	.206 ** n= 308	.390 ** n= 308	.301 ** n= 308	.297 ** n= 308	.419 ** n= 308	.485 ** n= 308					
38	.195 ** n= 308	.170 * n= 308	.249 ** n= 308	.261 ** n= 308	.180 ** n= 308	.300 ** n= 308	.279 ** n= 308	.293 ** n= 308	.281 ** n= 308	.287 ** n= 308	.311 ** n= 308	.411 ** n= 308	.157 * n= 308	.288 ** n= 308	.218 ** n= 308	.080 n= 308	.263 ** n= 308	.501 ** n= 308	.443 ** n= 308				
39	-.073 n= 308	.288 ** n= 308	.057 n= 308	.313 ** n= 308	.427 ** n= 308	.457 ** n= 308	.429 ** n= 308	.556 ** n= 308	.564 ** n= 308	.506 ** n= 308	.632 ** n= 308	.346 ** n= 308	.432 ** n= 308	.585 ** n= 308	.515 ** n= 308	.212 *** n= 308	.158 * n= 308	.252 ** n= 308	.373 ** n= 308	.290 ** n= 308			
40	-.024 n= 308	.242 n= 309	.161 ** n= 308	.204 ** n= 308	.401 ** n= 308	.491 ** n= 308	.411 ** n= 308	.501 ** n= 308	.521 ** n= 308	.474 ** n= 308	.571 ** n= 308	.393 ** n= 308	.500 ** n= 308	.610 ** n= 308	.542 ** n= 308	.159 * n= 308	.110 n= 308	.256 ** n= 308	.388 ** n= 308	.316 ** n= 308	.724 ** n= 308		
41	-.016 n= 306	.329 n= 306	.141 ** n= 306	.192 ** n= 306	.467 ** n= 306	.411 ** n= 306	.459 ** n= 306	.643 ** n= 306	.586 ** n= 306	.475 ** n= 306	.550 ** n= 306	.429 ** n= 306	.511 ** n= 306	.611 ** n= 306	.505 ** n= 306	.169 * n= 306	-.024 n= 306	.196 * n= 306	.175 * n= 306	.294 ** n= 306	.640 ** n= 306	.661 ** n= 306	
42	.083 n= 307	.295 ** n= 307	.254 ** n= 307	.347 ** n= 307	.326 ** n= 307	.416 ** n= 307	.428 ** n= 307	.558 ** n= 307	.596 ** n= 307	.570 ** n= 307	.530 ** n= 307	.384 ** n= 307	.550 ** n= 307	.544 ** n= 307	.656 ** n= 307	.158 ** n= 307	.141 * n= 307	.184 * n= 307	.289 ** n= 307	.254 ** n= 307	.591 ** n= 307	.653 ** n= 307	.568 ** n= 305	
43	.055 n= 308	.302 n= 308	.120 ** n= 308	.305 ** n= 308	.459 ** n= 308	.498 ** n= 308	.528 ** n= 308	.552 ** n= 308	.538 ** n= 308	.494 ** n= 308	.529 ** n= 308	.375 ** n= 308	.448 ** n= 308	.638 ** n= 308	.588 ** n= 308	.310 ** n= 308	.197 ** n= 308	.236 ** n= 308	.309 ** n= 308	.178 ** n= 308	.679 ** n= 308	.563 ** n= 308	.527 ** n= 306	.614 ** n= 307

** Correlation is significant at the 0.01 level (2-tailed) * Correlation is significant at the 0.05 level (2-tailed)

5.5 Skewness, kurtosis and correlation scores from the Care Processes domain

Scores were calculated for the sixteen items contained within the *Care Processes* domain.

Table 5.5 shows that skewness values of all the items are within lower +/- 1 range. Six of the items: 44, 45, 48, 52, 53 and 57 reveal kurtosis scores which exceed +/- 2, however each of their skewness scores were satisfactory. As with the other two constructs, no action was taken at this stage.

Table 5.5: PCPI-S: Skewness and kurtosis of the Care Processes domain items

Item no.	Person-centred Practice Inventory: Care Processes domain	Skewness	Kurtosis
	Working with patients' beliefs and values		
44	I integrate my knowledge of the person into care delivery.	-.687	2.942
45	I work with the person within the context of their family and carers.	-.893	3.004
46	I seek feedback on how people make sense of their care experience.	-.345	-.660
47	I encourage people receiving care to discuss what is important to them.	-.908	1.127
	Shared decision-making		
48	I include the family in care decisions where appropriate and/or in line with the person's wishes.	-.745	2.318
49	I work with the person to set health goals for their future.	-.288	-.400
50	I enable people receiving care to seek information about their care from other healthcare professionals.	-.812	1.869
	Engagement		
51	I try to understand the person's perspective.	.117	.561
52	I seek to resolve issues when my goals for the person receiving care differ from their perspectives.	-.596	2.248
53	I engage people in care processes where appropriate.	-.287	3.675

Item no.	Person-centred Practice Inventory: Care Processes domain	Skewness	Kurtosis
	Sympathetic presence		
54	I actively listen to people receiving care to identify unmet needs.	-.698	1.890
55	I gather additional information to help me support people receiving care.	-.802	1.595
56	I ensure my full attention is focused on the person when I am with them.	-.775	.494
	Providing holistic care		
57	I strive to gain a sense of the whole person.	-.905	2.150
58	I assess the needs of the person, taking account of all aspects of their lives.	-.820	1.029
59	I deliver care that takes account of the whole person.	-.854	1.392

5.5.1 Care processes item correlations scores

The correlation scores of the items contained within the Care Processes domain were examined. Table 5.6 shows there were positive correlations between all the items in the Care Processes domain with strong correlations between items; 44 – 45, 45 – 57, 52 – 53, 58 – 59.

Table 5.6: Correlation between items in the Care Processes domain

	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58
45	.760** n=308														
46	.461** n=308	.520** n=308													
47	.253** n=308	.497** n=308	.521** n=308												
48	.201** n=308	.556** n=308	.349** n=308	.501** n=308											
49	.276** n=308	.323** n=308	.456** n=308	.429** n=308	.392** n=308										
50	.159** n=308	.363** n=308	.454** n=308	.457** n=308	.519** n=308	.544** n=308									
51	.106** n=306	.467** n=306	.425** n=306	.499** n=306	.573** n=306	.421** n=306	.504** n=306								
52	.167** n=305	.472** n=305	.399** n=305	.492** n=305	.389** n=305	.365** n=305	.391** n=305	.688** n=305							
53	.155** n=306	.550** n=306	.421** n=306	.524** n=306	.527** n=306	.351** n=306	.477** n=306	.526** n=306	.743** n=305						
54	.171** n=306	.518** n=306	.495** n=306	.527** n=306	.554** n=306	.424** n=306	.582** n=306	.627** n=306	.561** n=305	.458** n=306					
55	.209** n=305	.423** n=305	.482** n=305	.508** n=305	.458** n=305	.426** n=305	.519** n=305	.458** n=305	.553** n=304	.626** n=305	.677** n=305				
56	.235** n=308	.449** n=306	.443** n=306	.439** n=306	.415** n=306	.441** n=306	.452** n=306	.351** n=306	.333** n=305	.469** n=306	.567** n=306	.484** n=305			
57	.195** n=306	.743** n=308	.454** n=308	.502** n=308	.557** n=308	.375** n=308	.346** n=308	.495** n=306	.519** n=305	.573** n=306	.540** n=306	.490** n=305	.442** n=306		
58	.205** n=308	.641** n=308	.454** n=308	.589** n=308	.548** n=308	.580** n=308	.529** n=308	.496** n=306	.477** n=305	.500** n=306	.609** n=306	.522** n=305	.516** n=306	.635** n=308	
59	.290** n=307	.640** n=307	.460** n=307	.667** n=307	.523** n=307	.497** n=307	.530** n=307	.432** n=305	.395** n=304	.527** n=305	.587** n=305	.537** n=304	.562** n=305	.600** n=307	.730** n=307

** Correlation is significant at the 0.01 level (2-tailed) * Correlation is significant at the 0.05 level (2-tailed)

5.6 Analysis of measurement model for the Person-centred Practice Inventory-Staff

In this following section the measurement model was tested using the data generated in the study. The measurement model was tested for factor structure as specified in the PCPI-S. Factor loading scores and indices of fit statistics, which are explained below, were examined.

5.6.1 Criteria for testing

If the measurement model did not fit the theoretical model a set criteria of modifications would be introduced to the factor structure in the following stages (Hair et al. 2010):

1. According to Hair et al. (2010) an acceptable factor loading score for sample size of over 250 is 0.35. Items with a factor score below this would be considered for deletion (provided this was theoretically sound). The model would then be retested until a model containing acceptable scores for all items was identified.
2. Correlated error covariances from items within factors would be set based first on the modifications suggested in the Modification Index recommended in the CFA. Highest correlated errors would be introduced first and the model would then be re-tested. This process would be continued until a satisfactory model was identified with acceptable loading factors for all items and adequate fit statistics.
3. Once the model was fitted in this manner the cross factor loadings would be examined for significance to the model fit and, where possible, would be removed through the use of correlated errors to explain the data. The objective of this process was to achieve as parsimonious a modified model as possible using the data.

5.6.2 Factor loadings

Factor loadings were examined for each of the 59 items within the PCPI-S. Factor loadings measure the relationship between the items and the construct and range from +/-1. The closer the value is to 1 the stronger the relationship is between the item and the construct. Wang and Wang (2012) state the factor loading must be statistically significant and above 0.3, however Hair et al. (2010) are more specific and set values according to sample size. They state an acceptable factor loading score for a sample size of over 250 is 0.35.

All factor loadings were found to be significant, p = 0.00 and as shown in Table 5.7, all were greater than the 0.35 value indicating an acceptable relationship between the items and their constructs (Hair et al. 2010).

Table 5.7: Factor loading scores for the items within the PCPI-S

Item	Factor loading	Standard error
1	0.457	0.049
2	0.742	0.036
3	0.595	0.042
4	0.706	0.047
5	0.523	0.052
6	0.686	0.039
7	0.391	0.053
8	0.672	0.052
9	0.790	0.031
10	0.743	0.030
11	0.601	0.045
12	0.838	0.048
13	0.554	0.053
14	0.713	0.042
15	0.662	0.047
16	0.669	0.046
17	0.712	0.034
18	0.854	0.030
19	0.571	0.055
20	0.399	0.056
21	0.603	0.062
22	0.663	0.037
23	0.634	0.038
24	0.828	0.023
25	0.817	0.026

26	0.954	0.010
27	0.956	0.009
28	0.785	0.024
29	0.821	0.023
30	0.743	0.032
31	0.690	0.030
32	0.789	0.025
33	0.716	0.027
34	0.476	0.042
35	0.590	0.041
36	0.842	0.038
37	0.663	0.041
38	0.575	0.045
39	0.829	0.026
40	0.815	0.025
41	0.764	0.028
42	0.763	0.027
43	0.798	0.028
44	0.794	0.025
45	0.799	0.030
46	0.721	0.033
47	0.770	0.032
48	0.749	0.032
49	0.653	0.038
50	0.716	0.034
51	0.771	0.044
52	0.765	0.035
53	0.889	0.030
54	0.810	0.033
55	0.808	0.026
56	0.697	0.039
57	0.807	0.025
58	0.814	0.022
59	0.830	0.026

5.6.3 Statistics of fit

According to Hair et al. (2010), three to four fit indices should provide adequate evidence of model fit. They state using one goodness-of-fit index is insufficient and recommend reporting the chi-square (X^2) and the associated degrees of freedom, one absolute fit index, one incremental fit index, one goodness-of-fit index and one badness-of-fit index. Therefore, the following established criteria of fit statistics were used to examine the appropriateness of the PCPI-S: Chi-square (a goodness-of-fit index), root mean square error of approximation (RMSEA: an absolute fit index and a

badness-of-fit index) and comparative fit index (CFI: an incremental fit index and a goodness-of-fit index). Table 5.8 shows the acceptable scores of the tests undertaken and those obtained from the data using the PCPI-S.

Table 5.8: The fit statistics scores and acceptable scores of the PCPI-S

Fit statistic	PCPI-S scores obtained	Acceptable scores
X^2	3266.31	
df	1516	
p	0.00	Greater than 0.05
RMSEA	0.06 (0.058 - 0.064, 90% C.I.)	Below 0.07 (Hair et al. 2010) 0.08 (MacCallum et al. 1996)
CFI	0.90	0.90 or greater (Hooper et al. 2008; Hair et al. 2010; Wang and Wang 2012)
Factor Loading	All scored > 0.35	0.35 or greater (Hair et al. 2010)

According to Albright and Park (2009), the X^2 measure determines the overall model fit. It provides a statistical test of the difference between the observed sample and the estimated covariances matrices. Ideally the test would show a small X^2 value and a corresponding large *p*-value giving an insignificant result at the 0.05 indicating that both models are equal and there are no statistically significant differences between the matrices threshold (Wang and Wang 2012). The results showed an overall poor fit with X^2 statistic of 3266.315 (df = 1516) and p = 0.00. The X^2 test however has limitations. It is sensitive to sample size and the number of items used (Albright and Park 2009; Hair et al. 2010). When large sample sizes are used the X^2 statistic usually rejects the model (Hooper et al. 2008), and an increase in the number of items used increases the X^2 statistic (Wang and Wang 2012) meaning that mathematical

properties, which do not affect the overall validity of a model, may indicate a poor fit. Indeed, Hair et al. (2010) state that when the sample size exceeds 250 and the number of variables is greater than 30, the *p*-value becomes less meaningful and in fact significant *p*-values can be expected. Several authors recommend evaluating the X^2 result in relation to the degrees of freedom, however, there is no one recommended chi-square/df ratio. Carmines and McIver (1981) suggest that a X^2 ratio of 2 or 3:1 is acceptable, while Jackson et al. (1993) suggest as high as a 5:1 ratio. The chi-square/df ratio of the data is 2.15:1 and therefore had an acceptable model fit. Due to the limitations of this test a number of authors (Hair et al. 2010; Hooper et al. 2008) recommend that alternative measures of fit should also be used.

The root mean square error of approximation (RMSEA) corrects for model complexity and sample size by including each of these in the calculation and performs better than other fit indices (Wang and Wang 2012). As it is a badness-of-fit index lower RMSEA values indicate a better fit. Various authors report different values; below 0.07 (Hair et al. 2010; Steiger 2007 in Hooper et al. 2008) and less than 0.08 (MacCallum et al. 1996). A benefit of the RMSEA is its ability for a confidence interval to be calculated around its value, which is generally reported in conjunction with the RMSEA (MacCallum et al. 1996). In a well-fitting model the lower limit is close to 0, while the upper limit should be less than 0.08 (Hooper et al. 2008). The RMSEA was 0.061 and the range with 90% confidence interval was 0.058 - 0.064 indicating an acceptable fit.

The CFI is a goodness-of-fit index and an incremental fit index. An incremental fit index comes from a group of indices also known as comparative fit indices, which compare the X^2 value to a baseline model which assumes that all variables are uncorrelated (Hair et al. 2010; Hooper et al. 2008). This index is among the most widely used due to its relative insensitivity to model complexity (Hair et al. 2010) and

sample size (Hooper et al. 2008). Values equal to or greater than 0.90 are usually recognised as a good fit (Hooper et al. 2008; Hair et al. 2010; Wang and Wang 2012). The CFI result was 0.90 and as illustrated in Table 5.8 the fit statistics scores were all within acceptable ranges.

5.7 Summary

This chapter has presented the reliability and validity testing for the PCPI-S through CFA. A previous study confirmed the mapping of the 17 constructs of the PCPI-S to the *Prerequisites*, *Care Environment* and *Care Processes* within the PCPF, leading to the development of the current three construct PCPI-S used within this study (Slater et al. 2017). Measurement of this PCPI-S with the ED responses revealed the following results. The RMSEA, CFI and factor loadings were all found to be within acceptable limits. While the X^2 was an overall poor fit, the many limitations with this test make it an unreliable one, particularly with a large sample size such as the one used in this study. The model was deemed to fit without any modifications and therefore the current three domain model was accepted. A conceptual representation of this model representing the relationships between the 59 items and the 17 constructs using the ED data is presented below in Figure 5.1.

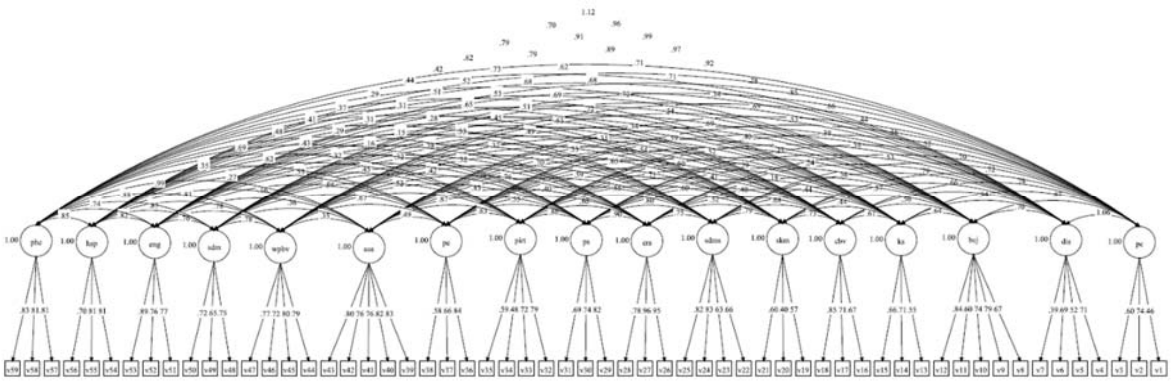

Figure 5.1: A conceptual representation of the PCPI-S measurement model using the ED data

CHAPTER 6: PATH ANALYSIS

A limitation of tools measuring person-centredness is that their conceptual underpinnings are rarely made explicit (Edvardsson and Innes 2010). The development of the Person-centred Practice Inventory – Staff (PCPI-S) addresses this limitation, as it is a theory driven measurement instrument (Slater et al 2017). This chapter will make the conceptual underpinnings of the Person-centred Practice Framework (PCPF) explicit, through the use of the PCPI-S as a measure. The strengths of the relationships shown in the data collected are also presented. This is undertaken using path analysis. Path analysis is used to test theoretical models that specify directional relationships among a number of observed variables and determines whether the model effectively accounts for the actual relationships observed in the sample data (O'Rourke and Hatcher 2013). In this study path analysis provides evidence of the relationship between the 17 constructs and three of the domains of the PCPF, assesses the relationships between these three domains, and gives a statistical measurement of the strength of the relationships, as measured by the PCPI-S. This is presented visually by a path diagram. The path diagram is a conceptual representation of the relationships between the domains which portray the PCPF.

This chapter begins with a recap of the PCPF describing the relationship between the constructs and domains. Constructs and domains will be examined for skewness and kurtosis scores and correlation scores. The model fit will be determined using fit statistics Chi square, degrees of freedom, Root Means Squared Estimates of Approximation (RMSEA) and Confirmation Fit Indices (CFI). Structural relationships within the Person-Centred Practice Framework will be tested for direction and

consistency with the theoretical expectations and the significance and strength of the relationships will be described.

6.1 The Person-Centred Practice Framework

As previously stated, the PCPF is a mid-range theory (McCormack and McCance 2010) which asserts that there are four components or domains which comprise person-centeredness. The theory contends that the attributes of staff are a necessary prerequisite to managing the care environment, in order to provide effective care through person-centred care processes. This leads to the achievement of person-centred outcomes for patients and staff (Slater et al. 2017). Therefore, the theory indicates that there is a unidirectional relationship between these domains as *Prerequisites* impact on the *Care Environment* which impacts on the delivery of *Care Processes* which impacts on *Outcomes* as shown in Figure 6.1. Three of these, with the exception of *Outcomes*, are tested using the PCPI-S. The *Outcomes* domain is not measured by the PCPI-S as it is considered to be what is produced by the culmination of the other three domains.

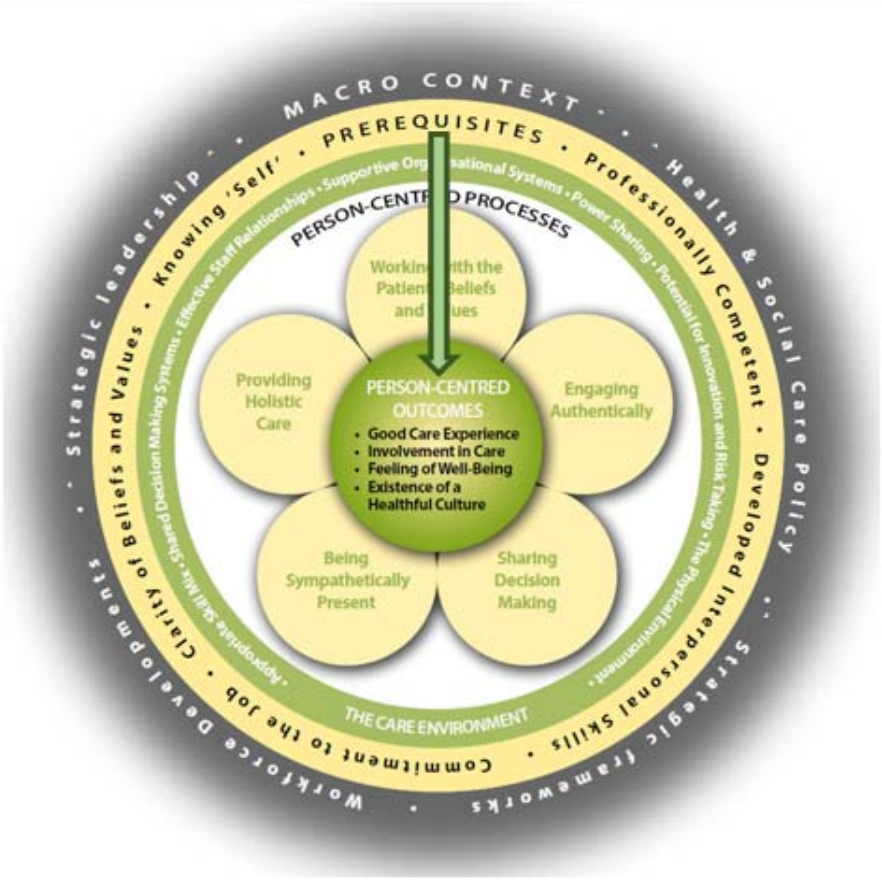

Figure 6.1: The direction of the theoretical expectations within the Person-centred Practice Framework

6.2 Skewness and kurtosis scores from the PCPI-S

Skewness and kurtosis scores were examined for the PCPI-S at both construct and domain level. These are reported according to their domain for ease of presentation.

6.2.1 Skewness and kurtosis scores for the Prerequisites domain

The kurtosis score of *'clarity of beliefs and values'* was high, although the skewness score was within the acceptable range. No action was taken at this stage. All other scores were within an acceptable range. These are shown in table 6.1.

Table 6.1: Construct and domain skewness and kurtosis scores for the Prerequisites domain

PREREQUISITES DOMAIN SCORES	Skewness	Kurtosis
Professionally competent	-.527	.742
Developed interpersonal skills	-.136	.777
Committed to job	-.494	-.204
Knowing self	-.536	.041
Clarity of beliefs and values	-1.213	3.226
PREREQUISITES DOMAIN	-.191	.075

6.2.2 Skewness and kurtosis scores for the Care Environment Domain

Table 6.2 shows the skewness and kurtosis scores within the *Care Environment* domain. All were within an acceptable range.

Table 6.2: Construct and domain skewness and kurtosis scores for the Care Environment domain

CARE ENVIRONMENT DOMAIN SCORES	Skewness	Kurtosis
Skill mix	-.527	1.017
Shared decision-making systems	-.291	-.636
Effective staff relationships	-.814	.322
Power sharing	-.700	.119
Potential for innovation and risk	-.567	.570
Physical environment	-.809	1.907
Supportive organisational systems	-.019	-.833
CARE ENVIRONMENT DOMAIN	-.489	.274

6.2.3 Skewness and kurtosis scores for the Care Processes Domain

All of the skewness and kurtosis scores within the Care Processes domain were within an acceptable range. These are shown in Table 6.3.

Table 6.3: Construct and domain skewness and kurtosis scores for the Care Processes domain

CARE PROCESSES DOMAIN SCORES	Skewness	Kurtosis
Working with patients' beliefs and values	-.329	1.031
Shared decision-making	-.265	.773
Engagement	.294	.831
Sympathetic presence	-.373	.555
Providing holistic care	-.593	.692
CARE PROCESSES DOMAIN	.117	.079

6.3 Correlation scores of the 17 constructs

The correlation scores between the 17 constructs were assessed. All correlations were positive indicating that as the value of one construct increases so does the other. As shown in Table 6.4, three pairs of constructs were identified as being strongly correlated with each other. These were *'effective staff relationships'* with *'power sharing'* (0.759), *'supportive organisational systems'* with *'power sharing'* (0.742), both within the Care Environment domain, and *'working with the patient's beliefs and values'* with *'providing holistic care'* (0.728) within the Care Processes domain. These are highlighted in the table for ease of reference. Overall this represents a small number and the scores were not considerably higher than the acceptable value of 0.7. The three highly correlated pairs were noted and maintained within the analysis and no action was taken at this stage. Depending on the results of the fit statistics, these may have required modification later in the process.

Table 6.4: Correlation between constructs in the PCPI-S

	PC	DIS	CJ	KS	CBV	SM	SDMS	ESR	PS	PIRT	PE	SOS	WPBV	SDM	ENG	SP
DIS	0.576** n=308															
CJ	0.538** n=308	0.396** n=308														
KS	0.413** n=308	0.526** n=308	0.427** n=308													
CBV	0.400** n=308	0.396** n=308	0.418** n=308	0.383** n=308												
SM	0.257** n=308	0.308** n=308	0.232** n=308	0.175** n=308	0.349** n=308											
SDMS	0.331** n=308	0.304** n=308	0.269** n=308	0.287** n=308	0.489** n=308	0.484** n=308										
ESR	0.235** n=308	0.250** n=308	0.140** n=308	0.115** n=308	0.310** n=308	0.377** n=308	0.594** n=308									
PS	0.286** n=308	0.253** n=308	0.157** n=308	0.215** n=308	0.285** n=308	0.381** n=308	0.658** n=308	0.759** n=308								
PIRT	0.372** n=308	0.275** n=308	0.272** n=308	0.275** n=308	0.402** n=308	0.405** n=308	0.536** n=308	0.507** n=308	0.560** n=308							
PE	0.420** n=308	0.362** n=308	0.450** n=308	0.309** n=308	0.345** n=308	0.297** n=308	0.444** n=308	0.314** n=308	0.402 n=308	0.371** n=308						
SOS	0.192** n=308	0.215** n=308	0.164** n=308	0.254** n=308	0.223** n=308	0.291** n=308	0.577** n=308	0.659** n=308	0.742** n=308	0.490** n=308	0.382** n=308					
WPBV	0.598** n=308	0.467** n=308	0.582** n=308	0.483** n=308	0.403** n=308	0.169** n=308	0.257** n=308	0.237** n=308	0.307** n=308	0.388** n=308	0.432** n=308	0.303** n=308				
SDM	0.540** n=308	0.374** n=308	0.466** n=308	0.424** n=308	0.318** n=308	0.152** n=308	0.236** n=308	0.249** n=308	0.245** n=308	0.229** n=308	0.357** n=308	0.278** n=308	0.546** n=308			
ENG	0.592** n=306	0.537** n=306	0.432** n=306	0.410** n=306	0.300** n=306	0.217** n=306	0.167** n=306	0.071* n=306	0.084* n=306	0.220** n=306	0.275** n=306	0.110* n=306	0.562** n=306	0.503** n=306		
SP	0.574** n=306	0.475** n=306	0.568** n=306	0.476** n=306	0.328** n=306	0.114** n=306	0.206** n=306	0.206** n=306	0.216** n=306	0.261** n=306	0.360** n=306	0.215** n=306	0.606** n=306	0.589** n=306	0.538** n=306	
PHC	0.612** n=308	0.424** n=308	0.593** n=308	0.377** n=308	0.290** n=308	0.159** n=308	0.220** n=308	0.278** n=308	0.317** n=308	0.315** n=308	0.443** n=308	0.284** n=308	0.728** n=308	0.597** n=308	0.515** n=306	0.611** n=306

KEY - PC: Being professionally competent. **DIS:** Developed interpersonal skills. **CJ:** Being committed to the job. **KS:** Knowing self. **CBV:** Clarity of beliefs and values. **SM:** Skill mix. **SDMS:** Shared decision-making systems**. ESR:** Effective staff relationships. **PS:** Power sharing. **PIRT:** Potential for innovation and risk taking. **PE:** Physical environment. **SOS:** Supportive organisational systems. **WPBV:** Working with the patient's beliefs and values. **SDM:** Shared decision-making. **ENG:** Engagement. **SP:** Having sympathetic presence. **PHC:** Providing holistic care.

** Correlation is significant at the 0.01 level (2-tailed) * Correlation is significant at the 0.05 level (2-tailed)

6.4 Path analysis procedure

The 17 constructs contained within the PCPI-S were tested and confirmed to be valid and reliable using CFA in the previous chapter. These constructs were derived from the summation of the items within the PCPI-S and each loaded onto the domain they represent according to the PCPF. Analysis was conducted using the statistical package Mplus version 7.3 using the estimator Maximum Likelihood with Robust Standard Errors (MLR) which adjusts the violation of non-normality (Cheng-Hsien 2016). This provided a statistical measure of the instrument that determined the fit between the 17 constructs with the three domains using the data collected in ED. The model was examined for fit and if necessary would have been modified according to a set criteria of modifications which would have been introduced to the factor structure in the following stages (Hair et al. 2010):

1. Constructs with a factor score below 0.35 would be considered for deletion provided this was theoretically sound (Hair et al. 2010). The model would be retested until a model containing acceptable scores for all constructs was identified.
2. Correlated error covariances from items within constructs would be set based first on the modifications suggested in the Modification Index recommended in the CFA. Highest model correlations would be modified first and the model would then be retested.
3. This process would be continued until a satisfactory model was identified with acceptable loading factors for all constructs and adequate fit statistics.
4. Once the model was fitted in this manner the cross factor loadings would be examined for significance to the model fit and, where possible, would be removed through the use of correlated errors to explain the data. The

objective of this process was to achieve as parsimonious a modified model as possible using the data.

The analysis also provided statistical standardised measures of the relationships between the domains of the PCPF on a unit level. To clarify, this means that when a relationship between two domains exists a rise of one unit in the first domain will provide a given value of change in the second domain. For instance, if a relationship between Domain 1 and Domain 2 has a standardised value of 0.50 then one unit rise in Domain 1 will produce a 0.50 unit rise in Domain 2.

6.4.1 Factor loadings

Factor loadings were examined for each of the 17 constructs within the PCPI-S for significance and scores. All were found to be significant $p < 0.05$ and as shown in Table 6.5, all were greater than 0.35 indicating an acceptable relationship between the constructs and their domains.

Table 6.5: Factor loading scores for the constructs within the PCPI-S

Item	Factor loading	Standard error
1	0.788	0.026
2	0.702	0.040
3	0.721	0.049
4	0.621	0.039
5	0.535	0.057
6	0.788	0.026
7	0.702	0.040
8	0.721	0.049
9	0.621	0.039
10	0.535	0.057
11	0.788	0.026
12	0.702	0.040
13	0.788	0.026
14	0.702	0.040
15	0.721	0.049
16	0.621	0.039
17	0.535	0.057

6.4.2 Statistics of fit

The fit indices of Chi-square, RMSEA and CFI were used to determine 'fit' for the path analysis. These are presented below in Table 6.6. The X^2 measure, determining the overall model fit, showed a poor fit with X^2 statistic of 331.42 (d = 113) and p = 0.00. The result was evaluated in relation to the degrees of freedom and the chi-square/df was 2.9:1 which suggests an acceptable model fit. The RMSEA value was 0.08. The range with 90% confidence interval was 0.70 - 0.89, the upper bound of which is outside the acceptable range of either authors, however Hair et al. (2010) caution against applying single cut-off values and emphasise that these are guides for usage rather than rules. Therefore, the fit indices were acceptable.

Table 6.6: The fit statistics scores and acceptable scores of the path analysis

Fit statistic	PCPI-S scores obtained	Acceptable scores
X^2	331.42	
Df	113	
P	0.00	Greater than 0.05
RMSEA	0.08 (0.070 - 0.089 with 90% C.I.)	Below 0.07 (Hair 2010) 0.08 (MacCallum et al. 1996)
CFI	0.90	0.90 or greater
Factor Loading	All scored > 0.35	0.35 or greater (Hair p128)

The path analysis results for the direction of the theoretical model were examined for the presence of significant relationships between the three domains ($p < 0.05$). This is shown in the path diagram in Figure 6.2. There was found to be a significant relationship between *Prerequisites* and the *Care Environment* (0.444, S.E. 0.065, p = 0.00, meaning one unit increase in *Prerequisites* will produce a 0.444 increase in *Care Environment*), and a negative but not significant relationship between the *Care*

Environment and *Care Processes* (-0.023, S.E. 0.059, p = 0.699). Examination of the modification indices revealed a significant correlated error between *Prerequisites* and *Care Processes* (0.932, S.E. 0.026, p = 0.00, meaning one unit increase in *Prerequisites* will produce a 0.932 increase in *Care Processes*) and indicates that there is a direct relationship between these two aspects, which was not specified in the theory but has been identified in the data.

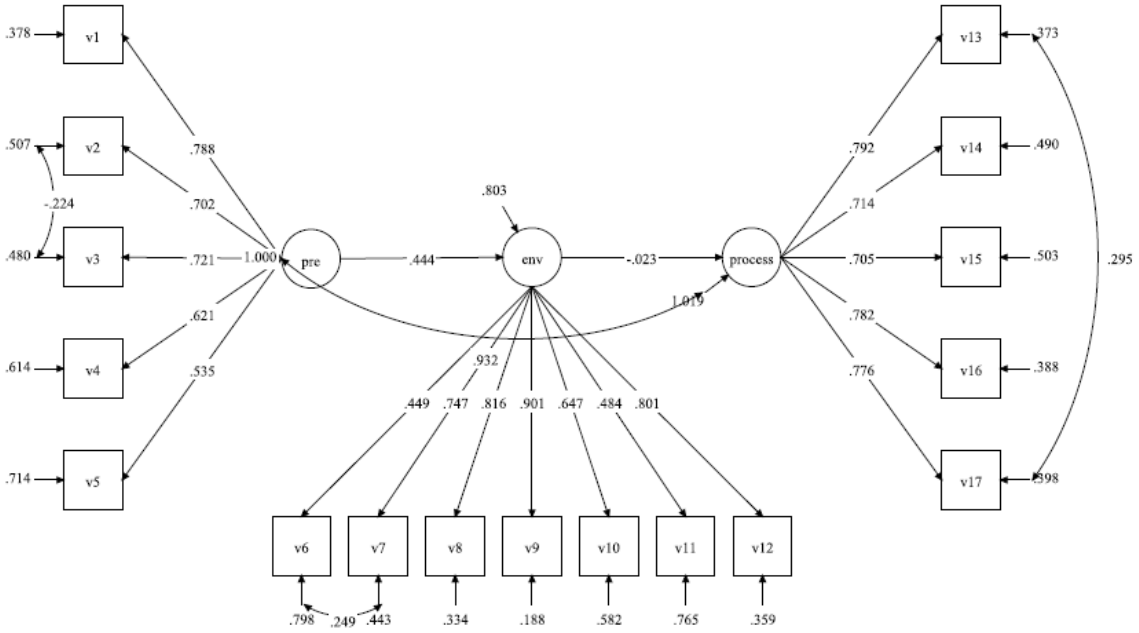

Figure 6.2: Path analysis diagram - a conceptual representation of the directional relationships between the domains of the Person-centred Practice Framework

6.5 Summary of fit statistics

This chapter has presented the findings of the testing of the conceptual underpinnings of PCPF using the PCPI-S as a measure of the PCPF. It has provided evidence of the psychometric properties of the PCPI-S measurement tool, which ensures that findings derived from it have a strong empirical base. It provides statistical evidence of the PCPF, and most importantly the findings map the theoretical framework that

explains person-centred practice. The CFI and factor loadings were both found to be within acceptable limits. The RMSEA statistic was acceptable with the upper bound of the 90% confidence interval range lying outside this. While the X^2 was an overall poor fit the many limitations with this test make it unreliable and the result was acceptable in relation to the degrees of freedom. A number of modification indices were proposed which could improve the model fit however Hooper et al. (2008) and Hair et al. (2010) warn that this should only be done if it fits with the theory, and the pursuit of better fit should not be at the expense of the theoretical model. Examination of the suggested fit modifications found none that were in keeping with the PCPF, therefore, the model was deemed to have an overall acceptable fit in relation to the theory. The path analysis of the PCPF showed that relationships existed between *Prerequisites* and *Care Environment* and *Prerequisites* and *Care Processes*, however the relationship between *Care Environment* and *Care Processes* was not significant. The fit statistics were acceptable, and all but one of the relationships were significant with reported strength and reflective of the theory overall, therefore the model was accepted.

CHAPTER 7: FINDINGS FROM THE PERSON-CENTRED PRACTICE INVENTORY-STAFF

This chapter presents the descriptive and inferential data obtained from the Person-centred Practice Inventory (staff) (PCPI-S). An examination of the demographic profile of the participants in relation to Emergency Department (ED) size, profession, total length of experience in clinical practice and length of ED experience is presented. Following this, results from the *Prerequisites, Care Environment* and *Care Processes* domains are presented in relation to each of these demographics.

7.1 Demographic profile of participants

As illustrated in Figure 7.1 the majority of the respondents (59%) worked in large EDs that treated over 50 000 patients per year. Six participants (2%) did not wish to disclose the size of EDs they worked in. Four percent (n = 13) did not answer this question.

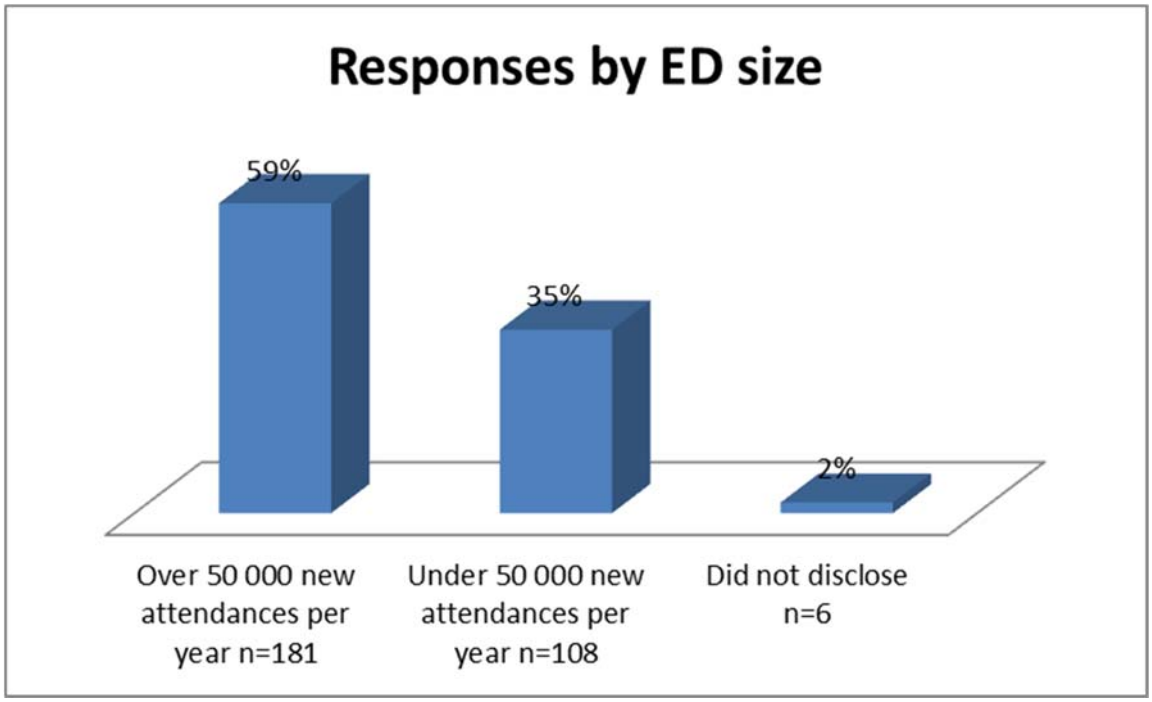

Figure 7.1: Responses by ED size

As shown in Figure 7.2, the majority of those who completed the questionnaire were nurses (n = 252, 82%). Individually doctors had a response rate of 27% (n = 50) and nurses 48% (n = 252).

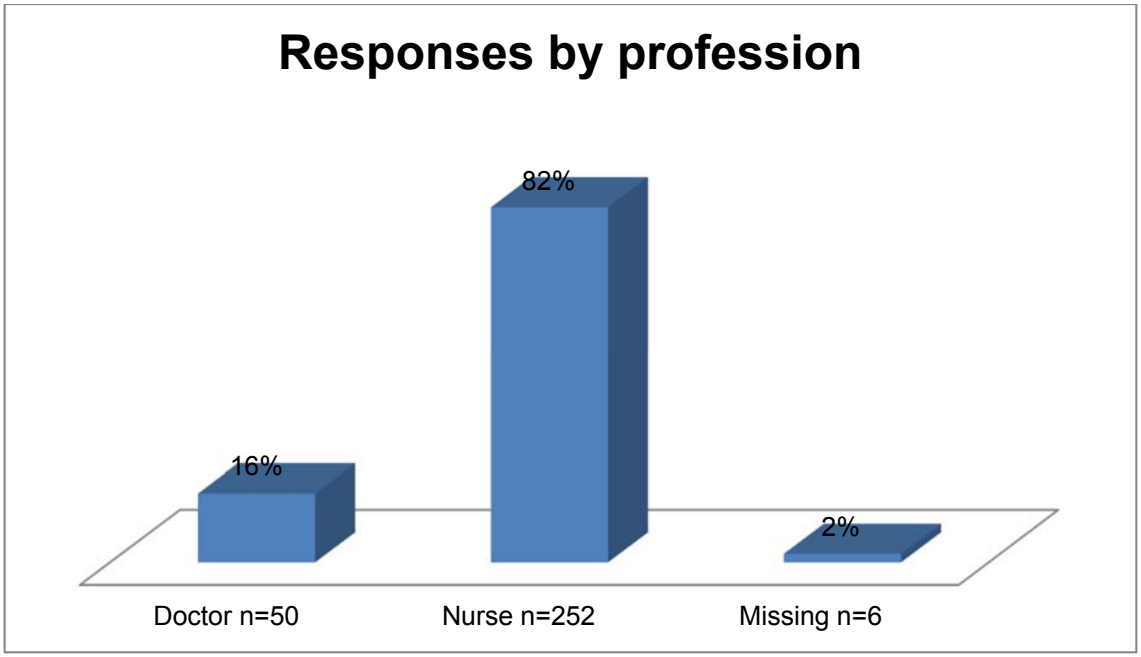

Figure 7.2: Responses by profession

Figure 7.3 shows the number of responses according to the total number of years in clinical practice and the total number of years in ED. The majority of staff (n = 175, 57%) had more than ten years' clinical experience in total. A substantial number of participants (n = 146, 47%) were experienced emergency care staff who had more than ten years' of experience working in EDs.

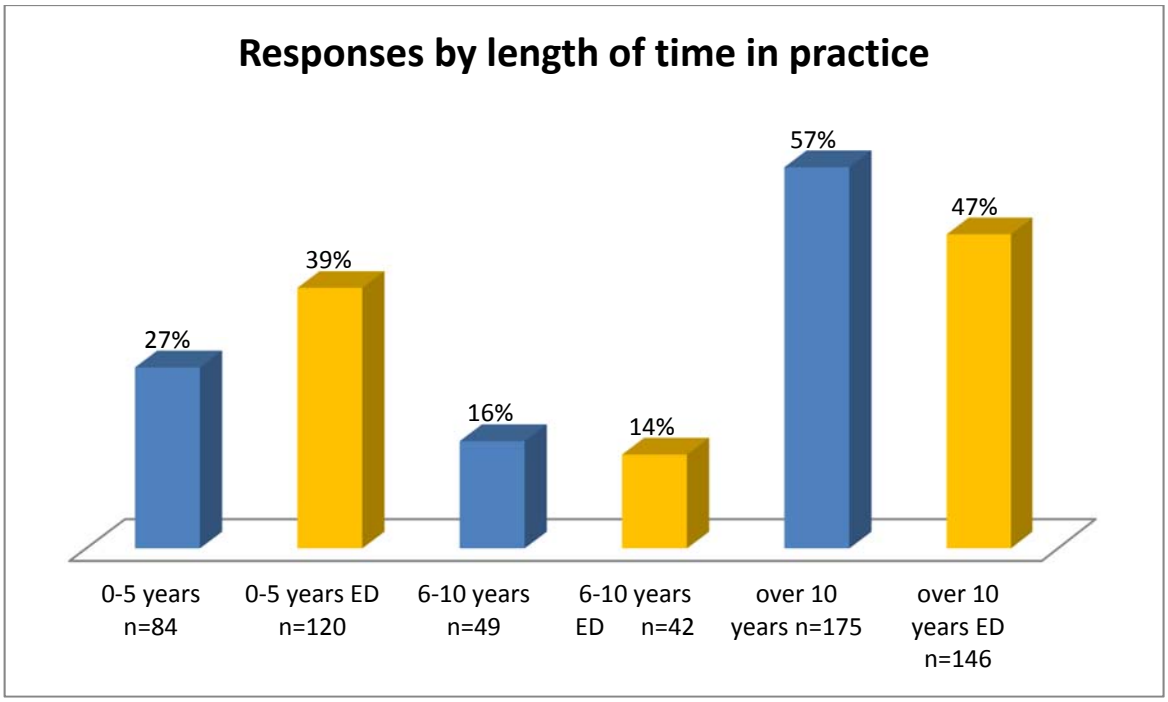

Figure 7.3: Responses by total number of years' clinical experience and total number of years' experience in ED

Figure 7.4 provides a breakdown of the responses for each profession according to the total number of years' clinical experience and Figure 7.5, according to the number of years' of ED experience. It shows that the majority of both medical and nursing staff who responded had both over ten years' total clinical experience and over ten years ED experience.

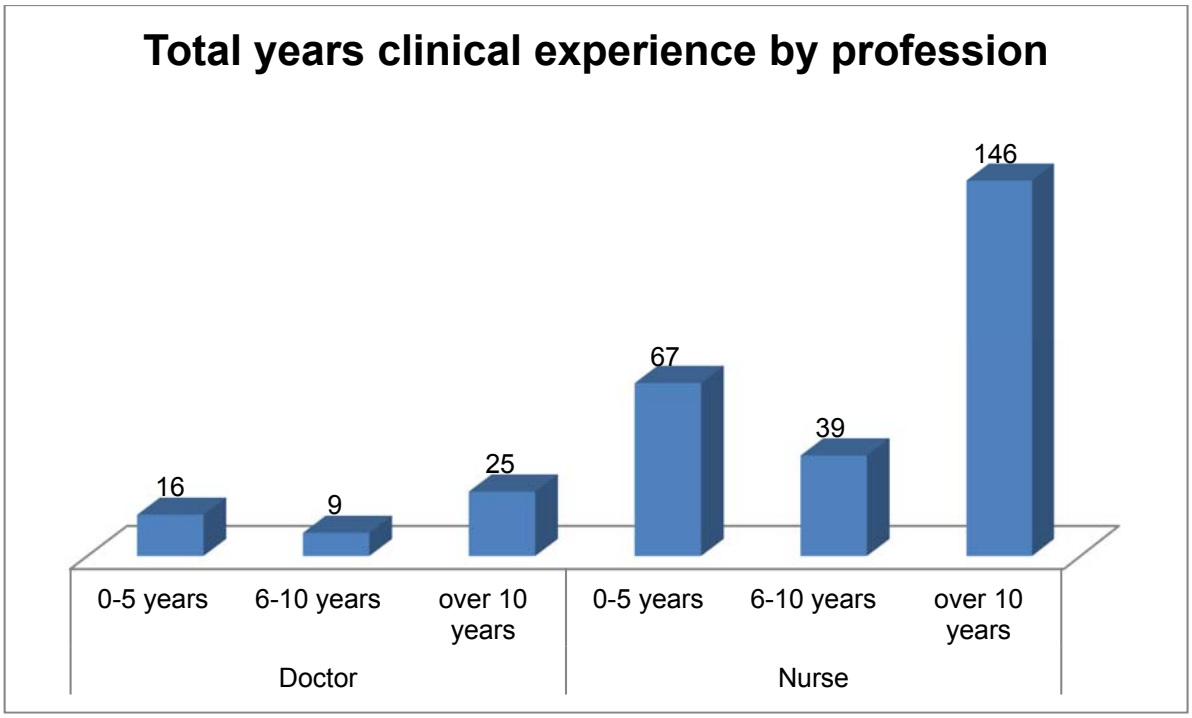

Figure 7.4: Responses by total years' clinical experience by profession

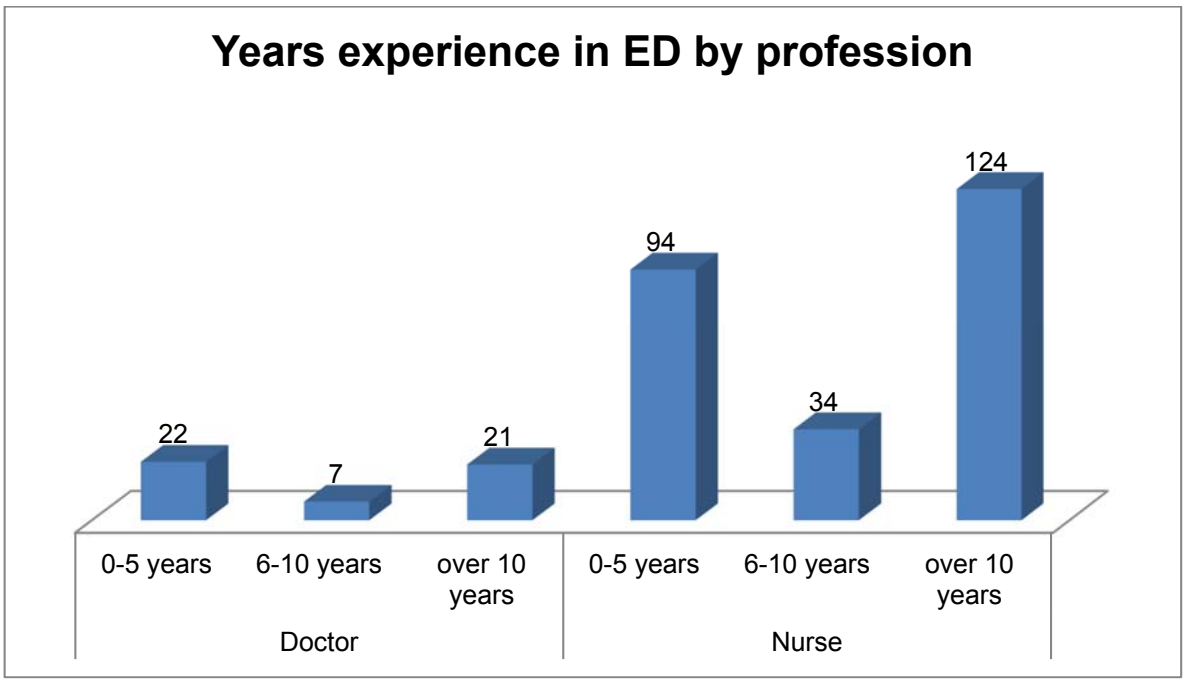

Figure 7.5: Responses by years' experience in ED by profession

Assessment of the demographics revealed that the majority of the responses came from those working in large EDs treating over 50 000 patients per year, and were nurses. Most had over 10 years total clinical experience, and over 10 years ED experience. The lowest number of responses came from nurses and doctors in the 6-10 years' experience group. These demographics were used to make comparisons from the data and are reported later in this chapter.

7.2 Scales analyses

Frequencies, percentages and mean scores were examined for each of the three domains, seventeen constructs and individual items within the PCPI-S. In addition, a number of inferential statistical tests; independent t-tests, analysis of variance, Mann Whitney U and Kruskal-Wallis tests were used to make comparisons across a range of demographics such as ED size, role, length of total clinical experience and length of ED experience.

7.2.1 The Prerequisites domain

The mean score for the *Prerequisites* domain and the five constructs within it were examined and are shown in Table 7.1. For interpretation of mean scores, the value of the mid-point was selected between each of the responses (Talk Stats 2005; Math and Arithmetic 2014). The total mean score for Prerequisites was 4 (SD = .39), indicating that staff agreed that they had the necessary attributes to deliver person-centred practice. *'Being committed to the job'* scored most positively (mean 4.25, SD .41) with *'clarity of beliefs and values'* scoring the lowest at 3.78 (SD .65).

Table 7.1: Mean scores for the constructs within the Prerequisites domain

PRE-REQUISITES	Scale mean 4.0	Std. Dev .39
Sub-scales	**Mean**	**Std. Dev**
Professionally competent	4.13	.49
Developed interpersonal skills	4.12	.41
Committed to job	4.25	.48
Knowing self	3.84	.61
Clarity of beliefs and values	3.78	.65

A closer scrutiny of the frequencies, percentages and mean scores for the items contained within the constructs of the *Prerequisites* domain (Table 7.2) was undertaken. It revealed that all the items within this domain had a mean within the *'agree'* category apart from *'I strive to deliver high quality care to people'* which had a mean within the *'strongly agree'* category and had the highest mean score (mean 4.75, SD .52) overall within the PCPI-S. This item was within the construct *'being committed to the job'*, and the next most positively scored item; *'I strive to deliver high quality care that is informed by evidence'* (mean 4.48, SD .64) was also within this construct.

Table 7.2: Frequencies, percentages and mean scores for items within the constructs of the Prerequisites domain

Professionally competent	SA	A	N	D	SD	MEAN	SD
I have the necessary skills to negotiate care options.	75 24.4%	204 66.2%	22 7.1%	6 1.9%	1 0.3%	4.12	.64
When I provide care I pay attention to more than the immediate physical task.	72 23.4%	181 58.8%	37 12%	18 5.8%	0	4	.77
I actively seek opportunities to extend my professional competence.**	117 38%	171 55.5%	11 3.6%	6 1.9%	1 0.3%	4.30	.66
Developed interpersonal skills	SA	A	N	D	SD	MEAN	SD
I ensure I hear and acknowledge others perspectives.**	63 20.5%	223 72.4%	18 5.8%	2 0.6%	0	4.13	.52
In my communication I demonstrate respect for others.**	145 47.1%	153 49.7%	7 2.3%	1 0.3%	0	4.44	.56
I use different communication techniques to find mutually agreed solutions.	35 11.4%	206 66.9%	45 14.6%	16 5.2%	6 1.9%	3.81	.78
I pay attention to how my non-verbal cues impact on my engagement with others.	65 21.1%	222 72.1%	11 3.6%	9 2.9%	1 .03%	4.11	.62

Being committed to the job	SA	A	N	D	SD	MEAN	SD
I strive to deliver high quality care to people.	239 77.6%	64 20.8%	1 0.3%	4 1.3%	0	4.75	.52
I seek opportunities to get to know the person and their family in order to provide holistic care.**	103 33.4%	165 53.6%	23 7.5%	16 5.2%	0	4.16	.77
I go out of my way to spend time with people receiving care.	74 24%	156 50.6%	53 17.2%	23 7.5%	2 0.6%	3.90	.87
I strive to deliver high quality care that is informed by evidence.	165 53.6%	134 43.5%	4 1.3%	3 1%	2 0.6%	4.48	.64
I continuously look for opportunities to improve the care experiences.**	53 17.2%	193 62.7%	51 16.6%	7 2.3%	1 0.3%	3.95	.68
Knowing self	SA	A	N	D	SD	MEAN	SD
I take time to explore why I react as I do in certain situations.	28 9.1%	187 60.7%	34 11%	53 17.2%	6 1.9%	3.58	.94
I use reflection to check out if my actions are consistent with my ways of being.	48 15.6%	183 59.4%	50 16.2%	27 8.8%	0	3.82	.80
I pay attention to how my life experiences influence my practice.	82 26.6%	190 61.7%	26 8.4%	10 3.2%	0	4.12	.68

Clarity of beliefs and values	SA	A	N	D	SD	MEAN	SD
I actively seek feedback from others about my practice.	45 14.6%	166 53.9%	64 20.8%	28 9.1%	5 1.6%	3.71	.88
I challenge colleagues when their practice is inconsistent with our team's shared values and beliefs.	33 10.7%	170 55.2%	63 20.5%	37 12%	5 1.6%	3.61	.89
I support colleagues to develop their practice to reflect the team's shared values and beliefs.	59 19.2%	207 67.2%	31 10.1%	7 2.3%	4 1.3%	4.01	.70

** Data missing

7.2.2 The Care Environment domain

The mean scores for the *Care Environment* domain and the seven constructs within it were calculated. As can be seen in Table 7.3, the overall scale score was 3.44 (SD = .59), indicating that staff neither agreed nor disagreed that they worked in a care environment that supported person-centred practice. Of particular note within this domain were the low mean scores of *'supportive organisational systems'* (mean 2.73, SD .93), *'shared decision-making systems'* (mean 3.13, SD.9) and *'power sharing'* (mean 3.36, SD .82). These scores indicated an overall neutral response to these constructs.

Table 7.3: Mean scores for the constructs within the Care Environment domain

CARE ENVIRONMENT	Scale mean 3.44	Std. Dev .59
	Mean	**Std. Dev**
Skill mix	3.95	.54
Shared decision-making systems	3.13	.90
Effective staff relationships	3.53	.92
Power sharing	3.36	.82
Potential for innovation and risk	3.58	.67
Physical environment	3.77	.65
Supportive organisational systems	2.73	.93

In order to examine this in greater depth the frequencies, percentages and mean scores were calculated for the constructs contained within the *Care Environment* domain. As seen in Table 7.4, this domain was the only one within the PCPI-S to have *'disagree'* and *'neutral'* scores within it. The lowest scored items overall within the PCPI-S were in the *'supportive organisational systems'* construct. These were *'in my team we take time to celebrate our achievements'* (mean 2.36, SD 1.12) and *'my organisation recognises and rewards success'* (mean 2.44, SD 1.14). Both these items had a mean score in the *'disagree'* category. The remaining three items within this category had a mean score in the *'neutral'* category; *'I am recognised for the contribution that I make to people having a good experience of care'* (mean 2.95, SD 1.24), *'I have the opportunity to discuss my practice and professional development on a regular basis'* (mean 2.68, SD 1.16) and *'I am supported to express concerns about an aspect of care'* (mean 3.21, SD 1.14). In both the *'shared decision-making systems'* construct and the *'power sharing'* construct three of the four items had a mean score within the *'neutral'* range, while, '*skill-mix*', '*potential for innovation and risk taking'* and the '*physical environment'* constructs all had one neutrally scored item within them.

Table 7.4: Frequencies, percentages and mean scores for items within the constructs of the Care Environment domain

Skill-mix	SA	A	N	D	SD	MEAN	SD
I recognise when there is a deficit in knowledge and skills in the team and its impact on care delivery.	81 26.3%	202 65.6%	17 5.5%	5 1.6%	3 1%	4.15	.67
I am able to make the case when skill mix falls below acceptable levels.**	29 9.4%	128 41.6%	62 20.1%	66 21.4%	23 7.5%	3.24	1.11
I value the input from all team members and their contributions to care.	150 48.7%	153 49.7%	4 1.3%	0	1 0.3%	4.46	.56
Shared decision-making systems	SA	A	N	D	SD	MEAN	SD
I actively participate in team meetings to inform my decision-making.	64 20.8%	148 48.1%	50 16.2%	36 11.7%	10 3.2%	3.71	1.02
I participate in organisation-wide decision-making forums that impact on practice.	14 4.5%	84 27.3%	47 15.3%	111 36%	52 16.9%	2.67	1.18
I am able to access opportunities to actively participate in influencing decisions in my directorate/division.	21 6.8%	103 33.4%	68 22.1%	81 26.3%	35 11.4%	2.98	1.15
My opinion is sought in clinical decision-making forums (e.g.	31 10.1%	120 39%	58 18.8%	66 21.4%	33 10.7%	3.16	1.19

ward rounds, case conferences, discharge planning).							
Effective staff relationships	SA	A	N	D	SD	MEAN	SD
I work in a team that values my contribution to person-centred care.	44 14.3%	158 51.3%	54 17.5%	38 12.3%	14 4.5%	3.58	1.02
I work in a team that encourages everyone's contribution to person-centred care.	49 15.9%	140 45.5%	61 19.8%	44 14.3%	14 4.5%	3.54	1.06
My colleagues positively role model the development of effective relationships.	24 7.8%	161 52.3%	71 23.1%	40 13%	12 3.9%	3.47	.95
Power sharing	SA	A	N	D	SD	MEAN	SD
The contribution of colleagues is recognised and acknowledged.	33 10.7%	135 43.8%	54 17.5%	57 18.5%	29 9.4%	3.28	1.16
I actively contribute to the development of shared goals.	21 6.8%	210 68.2%	49 15.9%	21 6.8%	7 2.3%	3.70	.79
The leader facilitates participation.	37 12%	145 47.1%	65 21.1%	36 11.7%	25 8.1%	3.43	1.10
I am encouraged and supported to lead developments in practice.	19 6.2%	105 34.1%	79 25.6%	75 24.4%	30 9.7%	3.03	1.11

Potential for innovation and risk taking	SA	A	N	D	SD	MEAN	SD
I am supported to do things differently to improve my practice.	26 8.4%	126 40.9%	78 25.3%	57 18.5%	21 6.8%	3.26	1.07
I am able to balance the use of evidence with taking risks.	34 11%	173 56.2%	61 19.8%	35 11.4%	5 1.6%	3.64	.88
I am committed to enhancing care by challenging practice.	45 14.6%	195 63.3%	53 17.2%	14 4.5%	1 0.3%	3.87	.72
The physical environment	SA	A	N	D	SD	MEAN	SD
I pay attention to the impact of the physical environment on people's dignity.	114 37%	172 55.8%	18 5.8%	2 0.6%	2 0.6%	4.28	.66
I challenge others to consider how different elements of the physical environment impact on person-centredness.	24 7.8%	139 45.1%	92 29.9%	41 13.3%	12 3.9%	3.40	.95
I seek out creative ways of improving the physical environment.	39 12.7%	152 49.4%	91 29.5%	16 5.2%	10 3.2%	3.63	.89
Supportive organisational systems	SA	A	N	D	SD	MEAN	SD
In my team we take time to celebrate our achievements.	11 3.6%	45 14.6%	67 21.8%	107 34.7%	78 25.3%	2.36	1.12
My organisation recognises and rewards success.	14 4.5%	44 14.3%	81 26.3%	94 30.5%	75 24.4%	2.44	1.14

I am recognised for the contribution that I make to people having a good experience of care.**	21 6.8%	114 37%	53 17.2%	66 21.4%	52 16.9%	2.95	1.24
I am supported to express concerns about an aspect of care.**	24 7.8%	135 43.8%	58 18.8%	60 19.5%	30 9.7%	3.21	1.14
I have the opportunity to discuss my practice and professional development on a regular basis.	15 4.9%	78 25.3%	58 18.8%	108 35.1%	49 15.9%	2.68	1.16

** Data missing

7.2.3 The Care Processes domain

Table 7.5 shows the mean score for the *Care Processes* domain and the five constructs within it. The total mean score for *Care Processes* was 4 (SD = .43) indicating that staff agreed that they engaged in the necessary care processes to deliver person-centred practice. These mean scores were lower than the *Prerequisites* mean scores but higher than the *Care Environment* mean scores. The scores were all within a narrow range and there is little difference between the overall lowest score of *'shared-decision making'* (mean 3.83, SD.56) and the highest score of *'engagement'* (mean 4.1, SD .41).

Table 7.5: Mean scores for the constructs within the Care Processes domain

CARE PROCESSES ITEMS	Scale mean 4.0	Std. Dev .44
	Mean	**Std. Dev**
Working with patients' beliefs and values	3.87	.54
Shared decision-making	3.83	.56
Engagement	4.10	.41
Sympathetic presence	4.03	.56
Providing holistic care	4.01	.60

The mean, frequency and percentage scores for the items within the constructs contained in the *Care Processes* domain were calculated and are shown in Table 7.6. The highest mean score was in the '*engagement'* construct; *'I try to understand the person's perspective'* (mean 4.25, SD .52). Paradoxically, the only two neutral scores within this domain relate to the person's perspective; *'I seek feedback on how people make sense of their care experience'* (mean 3.42, SD .90) within the *'working with the patient's beliefs and values'* construct and *'I work with the person to set health goals for their future'* (mean 3.42, SD .88) within the *'shared decision-making'* construct.

Table 7.6: Frequencies, percentages and mean scores for the items within the constructs of the Care Processes domain

Working with the patient's beliefs and values	SA	A	N	D	SD	MEAN	SD
I integrate my knowledge of the person into care delivery.	71 23.1%	209 67.9%	24 7.8%	3 1%	1 0.3%	4.12	.60
I work with the person within the context of their family and carers.	60 19.5%	213 69.2%	27 8.8%	7 2.3%	1 0.3%	4.05	.63
I seek feedback on how people make sense of their care experience.	23 7.5%	143 46.4%	83 26.9%	57 18.5%	2 0.6%	3.42	.90
I encourage people receiving care to discuss what is important to them.	46 14.9%	203 65.9%	36 11.7%	23 7.5%	0	3.88	.74
Shared decision-making	SA	A	N	D	SD	MEAN	SD
I include the family in care decisions where appropriate and/or in line with the person's wishes.	69 22.4%	212 68.8%	19 6.2%	8 2.6%	0	4.11	.61
I work with the person to set health goals for their future.	25 8.1%	132 42.9%	102 33.1%	46 14.9%	3 1%	3.42	.88
I enable people receiving care to seek information about their care from other healthcare professionals.	53 17.2%	202 65.6%	42 13.6%	10 3.2%	1 0.3%	3.96	.68

Engagement	SA	A	N	D	SD	MEAN	SD
I try to understand the person's perspective.**	87 28.2%	209 67.9%	9 2.9%	1 0.3%	0	4.25	.52
I seek to resolve issues when my goals for the person receiving care differ from their perspectives.**	37 12%	226 73.4%	37 12%	5 1.6%	0	3.97	.55
I engage people in care processes where appropriate.**	48 15.6%	241 78.2%	14 4.5%	3 1%	0	4.09	.48
Having sympathetic presence	SA	A	N	D	SD	MEAN	SD
I actively listen to people receiving care to identify unmet needs.**	66 21.4%	207 67.2%	25 8.1%	8 2.6%	0	4.08	.63
I gather additional information to help me support people receiving care.**	64 20.8%	200 64.9%	29 9.4%	12 3.9%	0	4.04	.68
I ensure my full attention is focused on the person when I am with them. **	73 23.7%	173 56.2%	38 12.3%	22 7.1%	0	3.97	.81

Providing holistic care	SA	A	N	D	SD	MEAN	SD
I strive to gain a sense of the whole person.	58 18.8%	204 66.2%	34 11%	11 3.6%	1 0.3%	4	.69
I assess the needs of the person, taking account of all aspects of their lives.	70 22.7%	188 61%	33 10.7%	17 5.5%	0	4.01	.75
I deliver care that takes account of the whole person.**	73 23.7%	184 59.7%	36 11.7%	13 4.2%	1 0.3%	4.03	.74

** Data missing

7.3 Comparing the impact of ED size

Independent t tests were used for the *Prerequisites* domain and Mann Whitney U tests were used for the *Care Environment* and *Care Processes* domains to compare the responses from staff in large EDs with those from smaller EDs. Tables 7.7 and 7.8 provides an overview of the scores. These were higher for staff in smaller EDs for every item, indicating that staff in these departments felt that they worked in a more person-centred way than those in larger EDs felt they did. The scores which reached statistical significance were *'knowing self', 'effective staff relationships', 'power sharing', 'the physical environment', 'supportive organisational systems', 'working with the patient's beliefs and values', 'shared decision-making', 'sympathetic presence'* and *'providing holistic care'*.

Table 7.7: Comparison of mean scores for staff working in large EDs and small EDs for the Prerequisites domain

PREREQUISITES DOMAIN						
	Large EDs		Small EDs			
Subscales	**Mean**	**SD**	**Mean**	**SD**	**T value**	**Sig. level**
Professionally competent	4.11	.48	4.19	.52	t (287) = 1.452	p = .15
Developed interpersonal skills	4.12	.41	4.16	.386	t (287) = .693	p = .49
Committed to the job	4.23	.476	4.33	.45	t (287) = 1.923	p = .06
Knowing self	3.74	.66	3.98	.48	t (287) = 3.471	p =.001*
Clarity of beliefs and values	3.73	.69	3.85	.57	t (287) = 1.432	p = .156

* Scores which reached statistical significance

Table 7.8: Comparison of mean scores for staff working in large EDs and small EDs for the Care Environment and Care Processes domains

CARE ENVIRONMENT DOMAIN							
	Large EDs		Small EDs				
Subscales	**Mean rank**	**Median**	**Mean rank**	**Median**	**Mann-Whitney U**	**Z value**	**Sig**
Skill mix	140.31	4.00	152.85	4.00	8926.00	-1.261	.207
Shared decision-making systems	137.62	3.25	157.37	3.25	8438.50	-1.950	.051
Effective staff relationships	134.84	3.67	162.02	4.00	7935.50	-2.722	.006*

Power sharing	130.49	3.25	169.31	3.75	7148.00	-3.845	.000*
Potential for innovation and risk taking	138.70	3.67	155.56	3.67	8633.00	-1.688	.091
The physical environment	135.11	3.67	161.57	4.01	7984.00	-2.644	.008*
Supportive organisational systems	130.94	2.61	168.56	3.01	7229.50	-3.709	.000*
CARE PROCESSES DOMAIN							
	Large EDs		**Small EDs**				
Subscales	**Mean rank**	**Median**	**Mean rank**	**Median**	**Mann-Whitney U**	**Z value**	**Sig**
Working with patients' beliefs and values	133.22	4.01	164.74	4.01	7642.50	-3.154	.002*
Shared decision-making	131.28	3.68	168.00	4.01	7290.50	-3.702	.000*
Engagement	139.67	4.01	151.39	4.01	8810.00	-1.239	.215
Sympathetic presence	134.34	4.00	160.50	4.00	7844.00	-2.668	.008*
Providing holistic care	133.10	4.00	164.95	4.00	7619.50	-3.240	.001*

* Scores which reached statistical significance

7.4 Comparing the impact of profession

To compare the mean scores between doctors and nurses for items contained within each of the 17 constructs, independent t-tests were conducted for the *Prerequisites* domain and Mann-Whitney U tests for the *Care Environment* and *Care Processes*

domains. Tables 7.9 and 7.10 provides an overview of the scores and it can be seen that nurses scored higher in 11 of the 17 constructs, however just three of these reached statistical significance. These were *'being committed to the job'* in the *Prerequisites* domain, *'physical environment'* in the *Care Environment* domain, and *'providing holistic care'* in the *Care Processes* domain. Doctors scored significantly higher than nurses in one construct, *'potential for innovation and risk taking'* which is within the *Care Environment* domain.

Table 7.9: Comparison of Doctors and Nurses in the Prerequisites domain

PREREQUISITES DOMAIN						
	Doctor		**Nurse**			
Constructs	**Mean**	**SD**	**Mean**	**SD**	**T value**	**Sig. level**
Professionally competent	4.05	.45	4.16	.50	t = (300) = 1.527	p =.128
Developed interpersonal skills	4.04	.38	4.14	.41	t = (300) = 1.599	p =.111
Committed to the job	4.08	.48	4.29	.48	t = (300) = 2.85	p =.005*
Knowing self	3.76	.63	3.86	.60	t = (300)= 1.104	p =.270
Clarity of beliefs and values	3.86	.41	3.76	.70	t = (300) = 1.310	p =.193

* Scores which reached statistical significance

Table 7.10: Comparison of Doctors and Nurses in the Care Environment and Care Processes domains

CARE ENVIRONMENT DOMAIN							
	Doctor		Nurse				
Constructs	**Mean rank**	**Median**	**Mean rank**	**Median**	**Mann-Whitney U**	**Z value**	**Sig**
Skill mix	141.12	4.00	153.56	4.00	5781.00	-.942	.346
Shared decision-making systems	152.09	3.25	151.38	3.25	6270.50	-.052	.958
Effective staff relationships	165.77	4.00	148.67	3.83	5586.50	-1.289	.197
Power sharing	164.06	3.75	149.01	3.50	5672.00	-1.121	.262
Potential for innovation and risk taking	180.51	4.00	145.74	3.67	4849.50	-2.616	.009
The physical environment	127.10	3.67	156.34	4.00	5080.00	-2.198	.028*
Supportive org. systems	172.53	3.00	147.33	2.60	5248.50	-1.868	.062*
CARE PROCESSES DOMAIN							
	Doctor		**Nurse**				
Constructs	**Mean rank**	**Median**	**Mean rank**	**Median**	**Mann-Whitney U**	**Z value**	**Sig**
Working with pt beliefs and values	142.96	3.75	153.19	4.00	5873.00	-.770	.441
Shared decision-making	134.83	3.67	154.81	4.00	5466.50	-1.516	.129
Engagement	141.35	4.00	152.33	4.00	5792.50	-.880	.379

Sympathetic presence	147.58	4.00	151.08	4.00	6104.00	-.270	.787
Providing holistic care	128.00	4.00	156.16	4.00	5125.00	-2.159	.031*

* Scores which reached statistical significance

7.5 Comparing the impact of the total length of clinical experience

The impact of the total length of clinical experience on the responses for each of the 17 constructs was examined using a one-way between groups analysis of variance for the *Prerequisites* domain and Kruskal-Wallis for the *Care Environment* and *Care Processes* domains. Participants were divided into three groups according to their length of time of clinical experience 0 - 5 years, 6 - 10 years, and over 10 years.

7.5.1 Prerequisites domain

Table 7.11 shows the scores for the *Prerequisites* domain. The only construct within this domain that reached statistical significance was that of *'clarity of beliefs and values'*. For this Levene's test of equal variance was violated, therefore the Welch statistical test was reported: $F = (2,121.5) = 4.1$, $p = .019$. Post-hoc comparisons using the Scheffé's method indicated that the mean score for group 1 (0 - 5 years total clinical experience) ($M = 3.58$, $SD = .80$) was significantly lower than group 3 (over 10 years total clinical experience) ($M = 3.86$, $SD = .59$). Group 2 (6 - 10 years total clinical experience) ($M = 3.81$, $SD = .52$) did not differ significantly from either group 1 or 3. This indicates that staff with more than 10 years total clinical experience felt they possessed greater clarity of beliefs and values than those with 0 -5 years total clinical experience felt they did.

Table 7.11: Comparison of length of total clinical experience in the Prerequisites domain

	F	df between groups, within groups	Sig	Mean		SD
Professionally competent	.451	2, 305	.638	0 - 5 yrs	4.10	.48
				6 - 10 yrs	4.14	.44
				over 10 yrs	4.16	.51
Developed interpersonal skills	1.244	2, 305	.290	0 - 5 yrs	4.06	.43
				6 -10 yrs	4.13	.35
				over 10 yrs	4.15	.41
Committed to job	.610	2, 305	.544	0 - 5 yrs	4.28	.49
				6 -10 yrs	4.18	.43
				over 10 yrs	4.25	.49
Knowing self	2.371	2, 305	.095	0 - 5 yrs	3.75	.59
				6 -10 yrs	3.8	.52
				over 10 yrs	3.90	.63
Clarity of beliefs and values[a]	4.118	2, 121.486	.019*	0 - 5 yrs	3.58	.80
				6 - 10 yrs	3.81	.52
				over 10 yrs	3.86	.59

[a]Levene's test violated therefore the Welch statistical test was used

* Scores which reached statistical significance

7.5.2 Care environment domain

Table 7.12 shows the results from the *Care Environment* domain and as can be seen, no clear pattern emerged. Differences between the scores in each group were small with only the *'skill mix'* construct reaching statistical significance. The Kruskal-Wallis test revealed a statistically significant difference in *'skill mix'* across the three levels of total years' clinical experience (Gp 1, n = 84: 0 - 5 yrs, Gp 2, n = 49: 6 - 10 yrs, Gp 3,

n = 175: over 10 years), χ^2 (2, n = 308), = 8.28, p = .016. All three groups recorded a median score of 4, the mean rank for each group was 0 - 5 yrs: 131.35, 6 - 10 yrs: 159.77 and over 10 years: 164.14. A series of Mann-Whitney U tests were undertaken to determine which of the three groups had significant differences between them. As multiple comparisons among same sample sub groups increases the risk a Type 1 error the Bonferroni adjustment was applied for these comparisons. The 3 pairwise comparisons of group 1 (0 - 5 years) with group 2 (6 - 10 years), group 1 (0 - 5 years) with group 3 (more than 10 years) and group 2 (6 - 10 years) with group 3 (more than 10 years) were undertaken one at a time. As three groups means 3 pair-wise comparisons a significance value of 0.05/3 = 0.017 was applied. The results showed that in *'skill mix'* those with 0-5 years' total experience (Md = 4, n = 84) scored significantly lower than those with over 10 years' total experience (Md = 4, n = 175), U = 5821, z = -2.766, p = .006. The median values scored the same however the mean rank for 0 - 5 years' experience was 111.80 and over 10 years' experience 138.74.

Table 7.12: Comparison of length of total clinical experience in the Care Environment domain

	Chi-Square	df	Sig	Mean Rank		Median
Skill mix	8.278	**2**	.016*	0 - 5 yrs*	131.35	4.00
				6 -10 yrs	159.77	4.00
				over 10 yrs*	164.14	4.00
Shared decision-making systems	5.353	2	.069	0 - 5 yrs	137.89	3.00
				6 -10 yrs	147.92	3.25
				over 10 yrs	164.31	3.25
Effective staff relationships	4.887	2	.087	0 - 5 yrs	172.46	4.00
				6 -10 yrs	148.50	4.00
				over 10 yrs	147.56	3.67
Power sharing	2.221	2	.329	0 - 5 yrs	160.97	3.75
				6 -10 yrs	137.93	3.50
				over 10 yrs	156.03	3.50
Potential for innovation and risk taking	1.139	2	.566	0 - 5 years	160.95	3.67
				6 -10 yrs	144.17	3.67
				over 10 yrs	154.29	3.67
The physical environment	3.107	2	.211	0 - 5 yrs	148.87	3.67
				6 - 10 yrs	138.66	3.67
				over 10 yrs	161.64	4.00
Supportive organisational systems	4.210	2	.122	0 - 5 yrs	170.86	2.90
				6 -10 yrs	142.26	2.60
				over 10 yrs	150.07	2.60

* Scores which reached statistical significance

7.5.3 Care processes domain

As can be seen in Table 7.13, those in the 6 - 10 years' clinical experience scored lowest in all of the five constructs within the Care Processes domain. Only two of the constructs within this domain *'working with the patients' beliefs and values'* and *'engagement'* reached statistical significance. A Kruskal-Wallis test revealed a statistically significant difference in the construct *'working with the patients' beliefs*

and values' across the three levels of total years' clinical experience (Gp 1, n = 84: 0 - 5 yrs, Gp 2, n = 49: 6 - 10 yrs, Gp 3, n = 175: over 10 years), χ^2 (2, n = 308), = 6.50, p = .039. Group 2 (6 - 10 yrs) recorded a lower median score (Md = 3.75) than the other two groups which both recorded median values of 4. The mean rank for 0 - 5 years was 166.21, 6 - 10 years: 126.85 and over 10 years: 156.62.

A Kruskal-Wallis test revealed a statistically significant difference in the construct *'engagement'* across the three levels of total years' clinical experience (Gp 1, n = 83: 0 - 5 yrs, Gp 2, n = 49: 6-10 yrs, Gp 3, n = 174: over 10 years), χ^2 (2, n = 306), = 8.61, p = .014. All three groups recorded a median score of 4. The mean rank for 0 - 5 years was 155.70, 6 - 10 years: 122.50 and over 13 years: 161.18.

Mann-Whitney U tests were used to determine which of the three groups had a significant difference between them in *'working with patients' beliefs and values'* and *'engagement'*. The same Bonferroni adjustment was applied as before. The results showed that for in *'working with patients' beliefs and values',* those 0 - 5 years' experience (Md = 4, n = 84) scored significantly higher than those with 6 - 10 years' experience (Md = 3.75, n = 49), U = 1518, z = -2.576, p = .010. The mean rank for 0 - 5 years' experience was 73.43 and 6 - 10 years' experience was 55.98. For *'engagement'*, those with over 10 years' experience (Md = 4, n = 174) scored significantly higher than those with 6 - 10 years' experience (Md = 4, n = 49), U = 3201, z = -2.876, p = .004. The mean rank for over 10 years' experience was 118.106 and those with 6 - 10 years' experience was 90.33 and over.

Table 7.13: Comparison of length of total clinical experience in the Care Processes domain

	Chi-Square	df	Sig	Mean Rank		Median
Working with patients' beliefs and values	6.502	2	.039*	0 - 5 yrs	166.21	4.00
				6 - 10 yrs	126.85	3.75
				Over 10 yrs	156.62	4.00
Shared decision-making	1.077	2	.584	0 - 5 yrs	162.63	4.00
				6 - 10 yrs	148.67	4.00
				over 10yrs	152.23	4.00
Engagement	8.607	2	.014*	0 - 5 yrs	155.70	4.00
				6 - 10 yrs	122.50	4.00
				over 10 yrs	161.18	4.00
Sympathetic presence	4.680	2	.096	0 - 5 yrs	170.50	4.00
				6 - 10 yrs	142.89	4.00
				over 10 yrs	148.38	4.00
Providing holistic care	.762	2	.683	0 - 5 yrs	161.17	4.00
				6 - 10 yrs	149.21	4.00
				over 10 yrs	152.78	4.00

* Scores which reached statistical significance

7.6 Comparing the impact of the length of ED experience

The impact of the length of ED experience on the responses for each of the 17 constructs was explored using a one-way between groups analysis of variance for the *Prerequisites* domain and Kruskal-Wallis for the *Care Environment* and *Care Processes* domains. The same three groups were used as previously (group 1: 0 - 5 years, group 2: 6 - 10 years, group 3: over 10 years).

7.6.1 Prerequisites domain

Within the *Prerequisites* domain two scores reached statistical significance as identified in Table 7.14. These were *'clarity of beliefs and values*' and *'knowing self'.*

For *'clarity of beliefs and values*' Levene's test of equal variance was violated, therefore the Welch statistical test was used: F = (2,126) = 9.5, p = .000. Post-hoc comparisons using the Scheffe test indicated that the mean score for those with 0 - 5 years' ED experience (M = 3.6, SD = .73), was significantly lower than those with 6-10 years' ED experience (M = 4.03, SD = .49) and those with over 10 years' experience (M = 3.85, SD .59). Those with 6 - 10 years' and over 10 years' ED experience did not differ significantly from each other.

ED staff with 0 - 5 years' ED experience scored significantly lower in *'knowing self'*: F = (2,305) = 3.4, p = .036. Post-hoc comparisons using the Scheffe test indicated that their mean score (M = 3.73, SD = .54) was significantly lower than those with over 10 years ED experience (M = 3.92, SD = .62). Those with 6 - 10 years ED experience (M = 3.85, SD = .70) did not differ significantly from either group.

Those with 0 - 5 years ED experience scored lowest in all but one of the constructs; *'professional competence'*, *'developed interpersonal skills'* and the two significantly lowest scores of *'knowing self'* and *'clarity of beliefs and values'*. They scored highest in none of the constructs indicating that of all the groups they felt least strongly that they possessed the necessary prerequisites to deliver person-centred care.

Table 7.14: Comparison of length of ED experience in the Prerequisites domain

	F	df between groups, within groups	Sig	Mean		SD
Professionally competent	.663	2, 305	.516	0 - 5 yrs	4.10	.46
				6 - 10 yrs	4.20	.44
				over 10 yrs	4.15	.53
Developed interpersonal skills	.906	2, 305	.405	0 - 5 yrs	4.09	.41
				6 - 10 yrs	4.11	.38
				over 10 yrs	4.15	.41
Committed to job	1.379	2, 305	.253	0 - 5 yrs	4.25	.47
				6 - 10 yrs	4.35	.39
				over 10 yrs	4.21	.51
Knowing self	3.365	2, 305	.036*	0 - 5 yrs	3.73	.54
				6 - 10 yrs	3.85	.69
				over 10 yrs	3.92	.62
Clarity of beliefs and values[a]	9.459	2, 126.02	.000*	0 - 5 yrs	3.60	.73
				6 - 10 yrs	4.03	.49
				over 10 yrs	3.85	.59

[a] Levene's test violated therefore the Welch statistical test was used

* Scores which reached statistical significance

7.6.2 Care environment domain

Table 7.15 shows the impact of length of ED experience on the responses within the *Care Environment* domain. The Kruskal-Wallis test revealed a statistically significant difference in '*skill mix',* '*shared decision-making systems' and 'the physical environment'. 'Skill mix'*: (0 - 5 yrs, n = 120, 6 - 10 yrs, n = 42, over 10 years, n = 146), χ^2 (2, n = 308), =10.55, p = .005. All three groups recorded a median score of 4.

'*shared decision-making systems*': (0 - 5 yrs, n = 120, 6 - 10 yrs, n = 42, over 10 years, n = 146), χ^2 (2, n = 308), = 10.92, p = .004. Group 1; 0 - 5 years, scored a lower median score (Md = 3) than group 2 and group 3 who recorded median values of 3.25. *'the physical environment'*: (0 - 5 yrs, n = 120, 6 - 10 yrs, n = 42, over 10 years, n = 146), χ^2 (2, n = 308), = 7.37, p = .025. Those with over 10 years ED experience scored a higher median score (Md = 4) than the other two groups which both recorded median values of 3.67.

Post-hoc comparisons to determine which of the three groups in *'skill mix', 'shared decision-making systems'* and *'the physical environment'* had a significant difference between were undertaken using a series of Mann-Whitney U tests (p< 0.017, Bonferroni adjusted). The results showed that in *'skill mix'* those with 0 - 5 years' ED experience (Md = 4, n = 120) scored significantly lower than those with over 10 years' ED experience (Md = 4, n = 146), U = 6802, z = -3.209, p = .001. The mean rank for 0 - 5 years' experience was 117.18 and for over 10 years' experience was 146.91.

For *'shared decision-making systems'* those with 0 - 5 years' ED experience (Md = 3, n = 120) scored significantly lower than those with over 10 years' ED experience (Md = 3.5, n = 146), U = 6814.5, z = -3.128, p = .002. The mean rank for 0 - 5 years' experience was 117.29 and for over 10 years' experience was 146.83.

For *'the physical environment'* those with 0 - 5 years' experience (Md = 3.67, n = 120), scored significantly lower than those with 6 - 10 years' experience (Md = 4, n = 42) U = 1804.5, z = -2.792, p = .005. The mean rank for 0-5 years' ED experience was 75.54 and 6 - 10 years' experience was 98.54

Table 7.15: Comparison of length of ED experience in the Care Environment domain

	Chi-Square	df	Sig	Mean Rank		Median
Skill mix	10.550	2	.005*	0 - 5 yrs	134.71	4.00
				6 - 10 yrs	159.94	4.00
				over 10 yrs	169.20	4.00
Shared decision-making systems	10.919	2	.004*	0 - 5 yrs	133.59	3.00
				6 - 10 yrs	168.60	3.25
				over 10 yrs	167.63	3.25
Effective staff relationships	3.060	2	.217	0 - 5 yrs	165.00	4.00
				6 - 10 yrs	153.32	4.00
				over 10 yrs	146.21	3.67
Power sharing	.039	2	.981	0 - 5 yrs	154.15	3.75
				6 - 10 yrs	152.45	3.50
				over 10 yrs	155.38	3.50
Pot for innovation and risk taking	.598	2	.742	0 - 5 years	151.36	3.67
				6 - 10 yrs	163.50	3.67
				over 10 yrs	154.49	3.67
The physical environment	7.366	2	.025*	0 - 5 yrs	140.24	3.67
				6-10 yrs	181.12	3.67
				over 10 yrs	158.57	4.00
Supportive org systems	3.589	2	.166	0 - 5 yrs	166.50	2.90
				6 - 10 yrs	147.98	2.60
				over 10 yrs	146.52	2.60

* Scores which reached statistical significance

7.6.3 Care Processes domain

Table 7.16 shows the results for the *Care Processes* domain. No clear patterns emerged and no results reached statistical significance.

Table 7.16: Comparison of length of ED experience in the Care Processes domain

	Chi-Square	df	Sig	Mean Rank		Median
Working with patients' beliefs and values	.076	2	.963	0 - 5 yrs	155.61	4.00
				6 - 10 yrs	151.29	3.75
				Over 10 yrs	154.51	4.00
Shared decision-making	2.882	2	.237	0 - 5 yrs	160.18	4.00
				6 - 10 yrs	167.73	4.00
				over 10yrs	146.03	4.00
Engagement	2.307	2	.316	0 - 5 yrs	145.03	4.00
				6-10 yrs	153.64	4.00
				over 10 yrs	160.41	4.00
Sympathetic presence	3.243	2	.198	0 - 5 yrs	160.21	4.00
				6 - 10 yrs	165.77	4.00
				over 10 yrs	144.43	4.00
Providing holistic care	1.572	2	.456	0 - 5 yrs	159.66	4.00
				6 - 10 yrs	162.06	4.00
				over 10 yrs	148.08	4.00

7.7 Key findings

The results showed that in general ED staff felt that they possessed the necessary prerequisites to deliver person-centred care. They also felt positively that they engaged in the necessary care processes for the delivery of person-centred care. Staff neither agreed nor disagreed that they worked in a care environment that was conducive to person-centred practice. Staff working in small EDs scored more positively for all of the constructs than those working in large EDs indicating that they felt they worked in a more person-centred environment and practised in a more person-centred way particularly in *'knowing self', 'effective staff relationships', 'power sharing', 'the physical environment', 'supportive organisational systems', 'working with*

the patient's beliefs and values', 'shared decision-making', 'sympathetic presence' and *'providing holistic care'*.

Nurses scored more highly in the majority of the *Prerequisites* and all of the *Care Processes* constructs while doctors scored more highly in the majority of the *Care Environment* constructs. This would indicate that nurses feel more strongly that they have the necessary prerequisites and engage in the care process for the delivery of person-centred care than doctors do, in particular regarding *'being committed to the job'*, *'the physical environment'* and *'providing holistic care'*. In turn, doctors appear to feel more strongly that they work in a care environment conducive to the delivery of person-centred care and in particular feel more strongly that they have the *'potential for innovation and risk taking'* than nurses do.

The impact of total length of clinical experience on the seventeen constructs was examined. While there were some differences few reached statistical significance. Those with 0 - 5 years total clinical experience scored significantly lower than those with over 10 years total clinical experience in *'clarity of beliefs and values'* and *'skill mix'.* They scored significantly higher than those with 0 - 6 years' total clinical experience in *'working with patients' beliefs and values'.*

Those with 6 - 10 years' total clinical experience scored highest in none of the seventeen constructs and scored lowest in all of the five constructs within the *Care Processes* domain, although just two of these reached statistical significance. They scored significantly lower than those 0 - 5 years' experience in *'working with patients' beliefs and values' and* significantly lower than those with over 10 years' experience in *'engagement'*.

Staff with more than 10 years total clinical experience scored highest in four of the five constructs within the *Prerequisites* domain, however, only *'clarity of beliefs and values'* reached statistical significance where they scored significantly higher than their counterparts with 0 - 5 years total clinical experience. They also scored significantly higher than this group in *'skill mix'* and significantly higher than those with 6 - 10 years total clinical experience in *engagement'*.

The impact of the length of ED experience on the seventeen constructs was examined. Within the *Prerequisites* domain those with 0 - 5 years ED experience scored lowest in four of the five constructs, however just two reached statistical significance. They scored significantly lower than their co-workers with over 10 years' ED experience for *'knowing self' and* significantly lower for *'clarity of beliefs and values*' than both the 6 - 10 years and over 10 years ED experience groups. This group scored lowest in four of the seven *Care Environment* constructs, with three of these being statistically significant. They scored significantly lower than those with over 10 years' ED experience in *'skill mix'* and *'shared decision-making systems'* and significantly lower than those with 6 - 10 years' experience in *'the physical environment'*.

As previously stated those with 6 - 10 years ED experience scored significantly higher than those with 0 - 5 years' ED experience in *'clarity of beliefs and values*' and *the physical environment'*. Those with over 10 years' ED experience scored significantly higher than those in the 0 - 5 years ED experience in *'knowing self', 'skill mix'* and *'shared decision-making systems'*

7.8 Summary

This chapter presented the descriptive and inferential results from the PCPI-S. The demographic profile of the participants in relation to ED size, profession, total length of experience in clinical practice and length of ED experience was presented. The results from the *Prerequisites, Care Environment* and *Care Processes* domains have been presented in relation to each of these demographics.

CHAPTER 8: QUALITATIVE FINDINGS: THEMATIC ANALYSIS

This chapter presents the analysis of the qualitative interviews. It is comprised of four core themes of *the changing face of ED*, *staffs' perception of emergency care*, *managing a chaotic environment* and *meeting patients' needs*. These core themes consist of a number of sub-themes derived from and evidenced throughout by extracts from the data as shown in Figure 8.1.

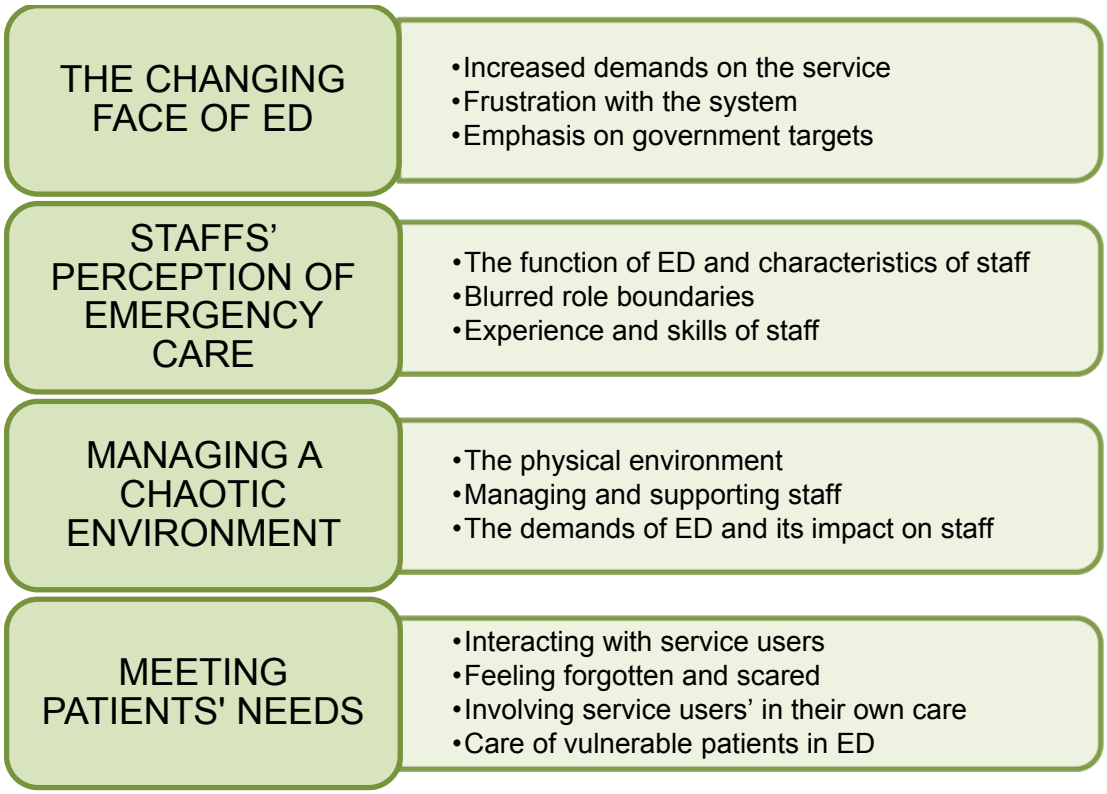

Figure 8.1: Themes and sub-themes in the qualitative data

8.1 A profile of the stage 2 participants

Table 8.1 shows the demographics of the stage 2 participants. These consisted of 14 nurses and 6 doctors with a range of grades and length of time working in ED. The

service user participants consisted of 14 patients and 10 relatives, ensuring a good mix of perspectives. All trusts were represented in each sample.

Table 8.1: A profile of the stage 2 participants

Staff/service user	Staff band/ grade	No.	0-5 yrs in ED	6-10 yrs in ED	> 10 yrs in ED	Trusts represented
Nurse (n = 14)	**Band 5**	4	3	1		All trusts represented
	Band 6	3	1		2	
	Band 7	7			7	
Doctor (n = 6)	**F2**	1	1			
	Middle grade	2			2	
	Consultant	3			3	
Patients		14				All trusts represented
Relatives		10				

8.2 The changing face of ED

This theme relates to how staff and service users perceived ED had evolved over the years to the system that operates today. Staff believed that the changes were not positive ones. They felt that they impacted greatly on the number and nature of patients who attended, and influenced how they carried out their care. The analysis identified three subthemes related to this theme of *increased demands on the service*, *frustration with the system* and *emphasis on government targets*, which will be explored.

8.2.1 Increased demands on the service

Staff felt that many aspects of their working life in ED had changed dramatically over the years due to a variety of reasons. Firstly, they felt that the actual numbers of patients attending ED had risen. In addition, they felt that the age profile of patients

had increased, particularly in the older age group. Staff also felt that patients were presenting with higher acuity conditions, all of which meant that their workload had increased.

> *"…the rise in patient attendance, patient acuity, more ambulances, more older patients, more patients needing nursing care, more patients spending longer in A&E…we have statistics and graphs to evidence all that…GP referrals, ambulance patients, we all know that them type of patients need more nursing care."* (Nurse 1)

In addition, staff reported how the expectations of patients and management had also increased over the years which added to their burden. They felt that some patients attended with unrealistic expectations about the range of treatments they could expect there, which reflected a misunderstanding of the function of ED. For example, some patients presented having searched the internet about potential tests and investigations they could receive, however these demands were often idealistic and could not always be fulfilled by the service.

> *"…the situation in A&E's has changed drastically…they are facing demands that never were there when I began, of the workload, and the expectations, not only of the people that are attending but the hierarchy, the management of what they expect that can be delivered…the internet is a great place for knowledge for the general public and they come expecting to get scans that are never going to happen here in an A&E or they come having themselves already diagnosed with something and trying to persuade them differently is extremely difficult…it's this, "I demand", that they should have and need to have and won't be going without it"* (Nurse 10)

The service provision outside ED appeared to impact on how ED services were provided particularly in relation to the rationalisation of emergency services. This had resulted in the centralisation of certain specialties and the closure of some departments. Staff reported how the closure of these services had a major impact on the workload in the nearby EDs.

> *"…the adjoining A&E Department was closed, so we assimilated that, so our workload more or less doubled… we absorbed the [name of hospital] A&E Department…we were seeing – I don't know, between fifty and sixty thousand people a year, or maybe sixty or seventy thousand people a year and that's gone up to over 100,000 people a year"* (Nurse 6)

The loss of certain on-site specialities meant that patients sometimes waited for lengthy periods in the referring department for transfer to the appropriate regional centre if they needed admission for treatment no longer offered locally. Meanwhile ED staff had to continue caring for them while they waited.

> *"…like the surgical patients here - acute abdomen - they're going to sit here and the journey is prolonged…they are admitted then to the surgical team in [name of hospital] - there's no beds. The patients in [name of hospital] are taking priority…and our patients are sitting here. It's a case of they've been seen, who takes responsibility for these patients? We have no surgeons on site…patients then are sitting here for a prolonged time before they get over and then are they going to deteriorate in their care, in their condition."* (Nurse 4).

8.2.2 Frustration with the system

The data revealed that the interface between primary and secondary care was blurred and this proved problematic for many ED staff. Staff voiced their frustration that the way the organisational system operated encouraged patients to attend ED inappropriately because they operated an open-door policy. They felt that they spent a lot of time treating patients with complaints that should have been treated by the patient's own General Practitioner (GP) such as non-emergency presentations or those with conditions that had been present for some time. They felt that patients viewed attending ED as an easier place to access treatment rather than having to wait for a GP appointment.

> *"…easy 40% of people, if not more, attend inappropriately…the emergency department, is what it says – it's the emergency department okay, so if you've had an accident, that's fine. If you have an emergency, that's fine, all good. If you have a sore shoulder for six weeks…if you*

> *have a sore big toe for two months, that's not an accident and emergency. If you have been to your GP and he's treated you with x, y and z, and it hasn't got any better…go back to your GP again…people come along and go "I just want to get it sorted out."* (Nurse 6).

Staff felt that GPs themselves were often to blame for this as they advised or referred their patients to attend ED to bypass the wait for investigations and results, which could have been accessed in the community. This was a source of frustration to ED staff. While this could be interpreted as staff making judgements about who was or was not a worthy ED patient, the data revealed that staff concerns were more about the fact that this work took up their time, which they felt could be better used with other patients who were more seriously ill and needed their care.

> *"Everybody is worthy to be seen, but, we have limits and I think we need to prioritise our limited resources to the people who needs our help most…I've got patients that have been sent up from the GP to check their U&E because they cannot get an appointment with the Practice Nurse until three days down the line. That is just very, abusing the system."* (Doctor 3)

The healthcare system did not allow GPs to directly admit patients to the inpatient wards. All admissions went through ED to be further assessed by an ED doctor who then arranged for an admission to the ward. Staff viewed this as duplication of the process, increasing the ED workload considerably and staff felt frustrated viewing this as another aspect which took their attention away from dealing with emergencies.

> *"…patients that actually have already been seen by a very competent GP have now to come here and be seen by a junior doctor…it's a stop off that isn't necessary and that big bulk of people makes a huge demand on the service…if we were dealing with our own workload we would have no difficulty managing it."* (Nurse 10).

This also had a significant impact on patients who were having an added step to their admission as they waited to be reassessed by ED staff prior to hospital admission.

Service users spoke of the frustration that having already been assessed by their GP and sent to hospital for admission, they had to be seen again in ED.

> *"… it was frustrating, you know, because I felt that there has to be an easier way to do it; to admit people…all we were there was to go through a process to get readmitted. Really all I wanted somebody to do was to sign it off and say "Right there's a bed in Surgical 2" and wheel him up and get him on the drip or get whatever it is that he needs to sort his bloods out. He didn't need treated as such in A&E, he just needed moved on, and it was that bottleneck which I felt was being caused by people like my father who shouldn't have been there; that was holding up the whole system…"* (SU 3).

ED staff felt that the ward medical staff caused unnecessary delays once the decision had been made to admit a patient. Examples of this include reassessing the patient to check if admission was necessary, or requesting ED to perform additional investigations that were not required for their ED care, and could have been performed on the ward once admitted.

> *"The inpatient staff are very junior…they think they are doing us a favour sometimes when we are passing the patient to them even for admission and when I have a patient that needs admitted, I phone them up sometimes, one of the first things they say "is the blood done" basically the expectation is that we do the bloods for them…we are a lot busier than they are. They should be doing some of their work themselves."* (Doctor 3).

Several service users commented on how when they got to the ward there were a number of empty beds, yet they had waited in ED for lengthy times as they had been told there were no beds available. They questioned how this could be allowed to happen when obviously the bed had been free earlier.

> *"…there definitely were beds and there were quite a few beds that night… it could be handled a lot, lot, lot smarter, you know, a lot sharper…there is lethargy... that a man as ill as him should be lying in a corridor on a trolley for eight hours…"* (SU 3)

The data revealed that ineffective patient flow through the system was a major frustration for ED staff. When there were no available beds on the wards patients could not be admitted and so they waited in ED for prolonged periods of time. This meant the patient flow stopped and backlogged in ED leading to what some staff described as bed blocking or trolley waits. The need for all admissions to go through ED was one contributing factor, however, there were also times when attendance and admission numbers were likely to be higher such as during the winter months which staff referred to as the *'winter pressures'* (Nurse 12). Staff described how this severe blockage and congestion in the system had a massive impact on their day to day work and stopped them functioning effectively as an ED. They felt that during these times patient care was compromised.

> *"…we like moving people quickly through the system and giving good care, but it's when the department becomes blocked with patients waiting on beds, or waiting on transport home, or waiting on assessment – that's when it all backs up. So the flow stops, and when the flow stops, that's when you stop being able to deliver good care, because you have hit a wall and everybody just keeps piling up. It's like cars hitting a wall and the one behind it hits, and hits and hits and that just keeps happening…you know once that happens, care is going to start to deteriorate."* (Nurse 7).

ED staff still needed to treat new patients presenting, some of whom had urgent or life-threatening conditions such as trauma and medical emergencies. The backlog, however, meant that there was limited space and staff to deal with these acutely ill patients. Staff had the additional tasks of continually monitoring times and flow, and needing to interact frequently with the bed manager in the hope of getting patients moved on through the system and out of ED to restore the equilibrium.

> *… you're continually monitoring your times, continually monitoring your patient flow …continually handing over to the bed managers patients who need beds but they're not going anywhere and that to me is one of the most stressful things because you can see at the other end the doors opening and more new patients coming in…it just becomes a melting pot because you've all your patients who are still sick…they still need ongoing*

> *patient care, they need ongoing medications, they need care in terms of hygiene, incontinence needs…your fundamentals of care at that end are so important but then on top of it you then have your new patients coming through, your traumas coming into your resus you have your MI's coming in, you have your stroke patients coming in needing one on one…if you get the flow going out at the other end obviously you can help get the flow working through…"* (Nurse 14).

As patients remained there for much longer than was necessary for their emergency care, nurses described delivering ongoing nursing care such as pressure area care and skin checks and providing help with hygiene needs; aspects which were not traditionally associated with ED nursing. Both medical and nursing staff felt that this type of care was not what should be delivered in ED. They told of carrying out nursing care and procedures that they would normally associate with care provided on wards and felt that they were not treating the type of patient that ED would normally treat. Staff described this as pulling back from their normal ED duties and working differently.

> *"It impacts on the care, because the longer people are here, the more nursing care they need obviously. Therefore, we are providing care that we were not historically used to. It wasn't common to feed people in an emergency department. It wasn't common to start toileting patients, turning them, checking their skin – all this sort of thing and that takes considerable resources and it came to a point in time, where we were pulling back from our normal A&E duties were, to actually just providing patient nursing care…"* (Nurse 1).

8.2.3 Emphasis on government targets

The data revealed many references to meeting government targets and they seemed to be a major factor that governed the daily work in ED. Targets that had to be adhered to included: the four hour and twelve-hour treatment and admission targets; triage time targets; and other more locally set targets of assessing patients with suspected specific conditions within certain time parameters.

> *"…we have sort of local targets as well, where I think our local targets are probably more realistic and important, we prioritise heart attacks, strokes, you know, self-harm, so they're tied to medical conditions…we triage as orange as in have to be seen within 10 minutes and we'd see them as priorities. We have targets as in we try to hit our doctor pickup within 60 minutes, triage within 15 minutes and things like that...the four-hour target which is the big one everybody talks about…"* (Doctor 5)

Staff felt that the main pressure to achieve government targets came from senior management outside ED. They made frequent references to how managers did not seem to understand their daily stresses and that all their focus was on achieving targets. Staff spoke of managers watching figures on screens and coming to the department to query why patients had not been seen within timeframes, without considering the pressure they were working under.

> *"…management are coming down and giving off because they're watching the screen in their office and going "why was that patient not triaged for twenty minutes" and then you have to justify why…with the influx of patients there might only be like a minute or two before their triage time breaches, they don't see that they just see numbers."* (Nurse 12)

Staff gave several examples which revealed the significance that management placed on meeting these time targets. Various tactics to influence staff were described such as rewarding them for breach-free periods or holding emergency meetings to deliberate over why one had occurred. These practices only seemed to infuriate staff further. The following quote illustrates how once when a twelve-hour admission target had been breached it was considered so significant that the senior managers and staff were called in over the weekend to discuss it. This staff member described her frustration as the emphasis was focused entirely on the timing of the care and not the actual care that the patient had received which had been satisfactory.

> *"I was in over the weekend we had a twelve hour breach and it was the biggest deal…in my mind it wasn't the most important thing that happened over the weekend because there are patients to be worrying about…everybody was called in and all the big chiefs were in on a Saturday morning and I just thought, what else would have brought you in here on a Saturday morning...I was pretty angry, because I just thought what's this got to do with patient care…I couldn't directly relate it to any particular patient's care, I couldn't make that link and say you know this is terrible for some patient, it wasn't…"* (Doctor 4).

Staff spoke of the extreme lengths that senior management would go to avoid patients overstaying in ED and being classified as a time breach. They identified a number of practices that were employed to prevent this from happening or appearing to happen. At times they temporarily opened wards or extra bed spaces within wards or departments where they could place the patient and therefore remove their name from the waiting list.

> *"…it's not uncommon in really busy times for it to be declared that there are no beds and maybe go off shift…and come in the next morning and find that the patient that you handed over the night before is still here and then panic stations are on…and they'll find this bed out of somewhere and stick somebody in anywhere just in an escalation space just to get them out of A&E…it's not an allocated space as such it's just where they make extra space to shove an extra bed in…"* (Nurse 12).

In some cases, less ethical practices were reported which were designed to disguise the fact that the patient had still not been admitted to a bed. In the quote below a staff member divulged how bed managers had tried to bully ED staff to take patients off the ED system. In this case the patient had an unstable condition and had suffered a cardiac arrest while lying in the corridor as they had been moved out of their treatment cubicle and their name removed from the system in order to prevent a time breach. [This incident had already been formally investigated].

> *N: "But it's not uncommon sometimes as well for bed managers trying to bully you into taking patients off the system before their twelve hours.*
> *I: And would they still be physically here?*

> *N: (very quietly) Sometimes. They try to bully, I do not do it because there was an incident at one stage where that bullying behaviour went on and the nurse in charge was told to do it or else, and done it and the patient was very unwell and cardiac arrested and whenever the cardiac arrest audit forms were to be filled out then the resus officers were challenging where did the arrest happen because the patient had left A&E at such and such a time and the arrest was such and such a time, did the patient arrest in the corridor and why was the patient, if it happened in the corridor, why were they transferred in the first place if they were that unstable…that sort of thing does happen, it doesn't be publicised but it happens…"* (Nurse 12).

In contrast to management, ED staff spoke of having less interest in figures and more in patient safety and outcomes. Some felt that the targets potentially put pressure on ED staff to compromise patient care in a number of ways. At times care was deflected away from patients in need to those in less need in a bid to prevent patients from breaching their targets. In addition, staff felt that rushing patients through the department within four hours was often not the best solution, because if patients were allowed to wait in ED they may be able to get investigative results back, treatments completed and not require admission.

> *"…getting somebody through here in four hours is not necessarily the right answer because some people are going to take much more to get the definitive outcome and if they had less emphasis on rushing in and out of the department not all of them would need to come into hospital, they could go home if they had had the procedures done and the answers…they continually look at figures and I am not interested in figures, I'm interested in the delivery of the service that I can give to the person and if it falls over four hours then that's okay, there was a reason why it fell over four hours and sadly they don't appreciate the fact that it's not always achievable…"* (Nurse 10).

Staff felt that there was a sense that other wards and departments saw meeting targets as being an ED concern. They felt that they were not considered to be an organisational goal and ward staff did not feel any responsibility or obligation towards achieving them unless they were about to be breached. They spoke of patients

waiting in ED who had received all their care yet ward staff were not interested in accepting them for admission until they were near their breach timeframe.

> *"…it's not, what's wrong with the person it's how long have we got, are they sitting at four hours yet, because even if you are ringing at two hours, it seems to be they've no urgency to bring them to their ward until they're ready to breach."* (Nurse 10).

Staff resented how ED was perceived as being responsible for these breaches when they occurred. They felt disheartened that this was the negative image that was portrayed to the public, yet the inability to move patients on in the system was beyond ED's control and therefore should not be seen as their fault.

> *"…I don't see the 4-hour target as actually being an A&E problem, I see it as a systems problem…everybody outside thinks it's A&E…the perception of the country is, you know, I was in A&E for 8 hours before anything happened but that's very rarely the case. They've actually probably been seen, sorted, had their antibiotics, had their fluids, had the catheter, had the chest X ray, been seen by a consultant and are just waiting to have a bed. So they've actually had their treatment and their care, it's just a case of the delay to the ward which people focus on."* (Doctor 5).

8.3 Staffs' perception of emergency care

This theme relates to how staff viewed the function of the Emergency Department and their roles within it. Three subthemes of *staffs' perception of the function of ED and their characteristics, blurred role boundaries* and *experience and skills of staff* comprise this theme.

8.3.1 The function of ED and characteristics of staff

The data revealed that ED staff felt that the function of their department was resuscitative and to deal with acutely unwell patients in the acute initial stage,

stabilising them before moving them on in the system to either admission or discharge. This relates to *frustration with the system* in section 8.2.2, where staff considered that the type of basic nursing care they were now often required to deliver, was not what should be performed in ED.

> *"Our job is to look after patients in the very acute phase, so you come into us, you get stabilised or you get your investigations done and initial treatment plan started. But after that, your ongoing care needs to be done by a ward based specialty, so our ED nurses should be the people who would start all the initial investigations to provide all the basic care, dressings, treatments and so on, but then be able to hand over the ongoing nutrition, skin care, toileting, washing…"* (Doctor 2).

The data further indicates that the nursing and medical staff felt that ED nurses possessed different traits and characteristics to nurses working in other areas. Staff felt it took a certain type of person to work in ED and they described ED nurses using a range of terms about the attributes they felt they shared. These related to how they enjoyed working in the busy, fast-paced, unpredictable environment that they considered ED to be and several mentioned enjoying working under pressure and loving the adrenaline rush.

> *"…there's probably certain similarities in terms of the fact we're sort of adrenaline junkies, we like the buzz, we like the variety of the work, we like the unpredictable nature of it. You know, as many nurses who work in the emergency department would say "I'd be bored anywhere else…"* (Nurse 14).

A number referred to ED nurses as if they had some indefinable, elusive quality which separated them from other nurses. They felt these qualities set them apart from other nurses and they described themselves as *"a wee bit special"* (Nurse 14). They felt what they possessed was inherent within them and not something that could be taught. Nurses quoted variations of the phrase *"there's a nurse that works in A&E and then there's an A&E nurse"* (Nurse 12) indicating that they felt it took more to

being an ED nurse than merely working there. This characteristic appeared to be something that ED staff could recognise in others, or the potential for it to develop within new staff.

> *"…I definitely think we are a different breed…even if you have students come through the department, be that medical or nursing, or you have junior doctors, you can pick the ED people out straightaway."* (Nurse 7).

This was supported by others who felt that they could easily identify those who did not possess these necessary characteristics, and that these staff would struggle to be accepted or fit into working in the ED environment.

> *"I'm usually fairly astute when we get new nurses to figure out whether they're going to manage it or not…because the nature of A&E…you can't teach a lot of that to someone, that is something within them…I do think you need to have a certain skill set and I think if you work on a ward…you can be a very good and very efficient nurse and your skills can be used brilliantly, but that doesn't necessarily mean that you can be used in A&E..."* (Nurse 8).

8.3.2 Blurred role boundaries

The data revealed there were areas where role boundaries between nurses and doctors appeared blurred, with both claiming to carry out duties from each other's professional workload. Doctors described carrying out nursing tasks such as dispensing medication, taking patients to the toilet and testing urine, dressing patients and calling patients into cubicles. This seemed to happen on an ad hoc basis in order to hasten the patient journey through the department when the nurses were very busy with other tasks.

> *"…you rely sometimes on your nursing staff to do things that maybe we wouldn't by practice do…more and more here it's creeping into us taking on duties that were never ours historically…from taking the patient to the toilet to get a urine sample…and testing it…it would be done by nursing*

> *staff but you could be waiting for a very long period of time…you feel pressure to do things to help. But then it's not the most, let's say the most effective use of our time when we've other roles as well..."* (Doctor 5).

Similarly, nurses described undertaking technical tasks that were traditionally in the medical domain. This was particularly apparent in the expanded emergency nurse practitioner (ENP) role where nurses with additional skills and knowledge autonomously treated patients with minor injuries or illnesses. Many other nurses also spoke of undertaking medical-technical tasks as if they were accepted aspects of their nursing job, while others recognised that they had previously sat within the medical domain but had now become integrated into their nursing role. The motivation for nurses undertaking medical tasks differed from that of doctors performing nursing tasks in that nurses appeared to feel that they were advancing themselves through this.

> *"I think A&E is an area where it's easier to move towards that because of pressures and there's more need for that aspect of care, the more medical approach… they feel better for themselves that I'm fit to do tasks that doctors do and I'm more advanced now and it looks better, it looks better too from the outside."* (Nurse 11).

Many nurses admitted to enjoying this expanded aspect of their role and prioritised medical care over nursing care thereby emulating the medical model of care. The dialogue below demonstrates how nursing staff rationalised the competing demands of their role and prioritised medical-technical care.

> *R: "…you've got an elderly person who has a chest infection, who is waiting in ED for eight hours for a bed. I would say they'll have their chest x-ray done, they'll have their observations done, they'll have their IV antibiotics done. However, they may not be particularly comfortable on a trolley. They may not get their oral hygiene done. They may not get the extra cups of tea and water. They may not get the 20 minutes of somebody being able to have a conversation with them…they get the interventions done, that their condition needs, but I'm not convinced they get that holistic person-centred care that they need.*

D: Is that not the nursing bit but?

R: Yes, I suppose it is the nursing bit, it's the extra nursing bit.

D; So what are nurses delivering? Are you saying the nurses are delivering the intervention bit?

R: …yes, and I would agree with that, they are more tech – I think they can do the other, but if you've got eight or nine people, are you going to give them all a cup of tea and make them comfortable, or are you going to give them their IV antibiotics that will actually make them survive, and that's a very hard decision for nurses, because the majority of nurses will want to do both. But if you've got that decision of what do you do - do you do the observations, IV antibiotics, make sure they get their medication, or do you stand and talk to them for 15 minutes, give them a cup of tea and fluff their pillows? And that's, you know, it's a very hard decision. You are standing in a Court of Law - there's no point in saying, well I didn't give them their IV antibiotics and that's why they died of their chest infection, but they had a cup of tea and their pillows were comfortable." (Nurse 7).

Some nurses were uncomfortable with the compromises they felt they had to make as carrying out medical interventions meant they had less time for nursing care. Many staff spoke of the vast list of tasks and expanded skills they undertook which impacted on the time available to carry out nursing care. The quote below illustrates the exasperation some staff felt at how the situation had developed in ED.

"…the staff on that floor there haven't got the time hardly to go in to talk to the patients because they have all these tasks that were doctor's jobs in years gone by and now they have filtered down to be nursing jobs instead of actual nurses being nurses…sometimes you create your own monster and when you have created a monster where the nurses can do all these wonderful things but are they nursing, are they actually going to see do you need a drink of water because your lips are dry and hacked or did I not even notice that your lips were dry and hacked because I was that busy next door doing a whole procedure that really my medical colleague should have been doing, so sadly that's where we're going which is not good." (Nurse 10).

8.3.3 Experience and skills of staff

The data revealed that ED nurses were a highly trained group of staff. When they spoke of their knowledge and skills they did so in terms of the acquisition of technical

skills and the advanced specialist tasks they performed. This sub-theme links to the *blurred role boundaries* sub-theme in the previous section. Nursing staff told of having skills such as advanced life support and trauma critical care training and having the ability to work with specialised machines and technology. They spoke of using expanded skills such as referring to X-ray and initiating the investigation process to speed the patients' journey through the department.

> *"…we have probably advanced level skills and experience in different things like, for instance resus, you know we get all the airway specific training and setting up your art lines and you get all your advanced paediatric training and your advanced life support, your trauma critical care…"* (Nurse 12)

A small number of staff recognised that they needed more than technical skills to adequately address patient care. They felt that there were gaps in their knowledge base in aspects such as mental health and bereavement training, and that current course provision did not always equip them to address the actual needs of the patients attending EDs. They believed however that while these courses were available they were not considered to be a priority for management.

> *"…dementia care awareness training, we could have bereavement support training…I'm saying these are courses that are out there and that some staff have got to but it's something that not all staff will get to because management will focus first on mandatory training and it turns back into a tick box exercise…and sometimes senior management…forget in reality the environment that these people work in."* (Nurse 11).

Staff felt that the development of necessary skills and experience required considerable investment and that it took considerable time and resources to train ED staff adequately. They felt that both formal training and in-house learning increased these skills and were invaluable to them. Many, however spoke of a lack of resources and time to allow staff to go on formal courses and training. Staff felt strongly that their

level of competence and skills impacted on the care that they delivered and it was necessary to have a highly skilled workforce to deliver a quality service.

> *"I certainly believe A&E nurses need massive investment when they come to ED, they need protected time to learn…to be supervised and unfortunately that's something that I believe is not thought highly enough of in nursing management… you can't just do it ad hoc-ly and you can't do it without a structure to their learning and development…we need a skilled nurse to know what to do…then you need the nurse with the know-how to go and do something about it…I believe it does have a massive impact on patient care…in order to have appropriate patient outcomes and appropriate patient experience and to have a quality service…you need a workforce that is appropriately skilled and these things just don't happen overnight."* (Nurse 1).

They felt that when the department was staffed by experienced staff more was done to expedite the patient's journey through. In addition, the experienced staff were able to make decisions at triage about redirecting patients to appropriate areas and departments which had the effect of reducing the burden on ED. They felt that the more experienced nurses displayed a level of knowledge and intuition which allowed them to pre-empt potential problems and deal with them compared to their more junior inexperienced colleagues.

> *"I think the senior nurses can do the multi-tasking much more efficiently, competently and better, because they're used to it, they can work at that pace, and they can pick up on what the patient is either saying, or not saying, or how they are looking or how the relative is looking when the patient is talking or vice versa. I think the junior nurses find that very difficult"* (Nurse 8).

8.4 Managing a chaotic environment

This theme refers to how staff managed their daily work within the emergency department. It consists of three subthemes of *the physical environment, supporting and managing staff, and the demands of ED and its impact on staff*.

8.4.1 The physical environment

Overcrowding and congestion in the ED seemed to be a major problem. When there was a backlog of patients waiting for beds this impacted on the space available for treating new patients. Overcrowding led to many problems such as the need to juggle patients around for treatments, a lack of privacy, poor cleanliness and a lack of available equipment. As this subtheme reveals staff felt that the physical environment in which the patients were treated had a significant impact on the quality of care that they could deliver. Many openly stated how care was compromised as a result, and evidence of this is threaded through the quotes within this subtheme.

One nurse stated *"environmentally, the walls don't stretch"* (Nurse 6) so creative ways had to be found to prevent ED coming to a complete standstill. Staff spoke of it being a juggling act in deciding who was sickest and needed the cubicle most. They described the dilemma they faced in deciding where to place patients who were waiting for admission to the wards. Many of these patients were potentially very ill and unstable requiring complex procedures, treatments and monitoring. Due to the need for close observation, some were kept in majors cubicles, which prevented admission of new patients. They described having to make difficult decisions and keep the more seriously ill patients in cubicles and place those less ill along the corridors. At times nursing staff felt pressure from doctors to move patients out onto the corridors. They were aware that the justification for this was to maintain flow and treat those waiting to be seen, as there may have been potentially very ill patients in the waiting room or ambulance bay. They spoke of the constant worry and the fear of waiting patients deteriorating as they were responsible for all the patients in the department.

> *"Do you block all your cubicles in majors and stop bringing new people in, which you don't know what's wrong with them, so they are the undiagnosed person in the waiting room. Do you move the people that were in the cubicles out onto the corridor…it's a bit of a juggling match, probably what you will find most…empty half their cubicles onto the*

> *corridor and keep the other half there and try and manage, still getting people seen but still keeping their sicker patients in the cubicles…Some of our doctors would love you to just empty everybody out of the cubicles but if you have somebody that is not well it is not appropriate to nurse that patient on a corridor without any, sort of, dignity whatsoever…nobody wants to have to do it but…you can't afford not to get people in from the waiting room that are potentially quite unwell ..."* (Nurse 9)

Closely linked with overcrowding was a lack of privacy and dignity. Staff were aware of how in these situations patients were nursed in very close proximity and care was compromised. Due to the lack of clinical space at times interviews and examinations took place in open non-clinical areas. This meant that often there were other patients in close proximity. Again staff were aware that this was not satisfactory, however they felt they needed to do this just to keep the flow of patients moving through the system. Some patients expressed their discomfort at being treated in this environment.

> *"…I got my blood test done beside the toilet which I thought was strange because all the other people who were waiting...were just sitting watching me getting my blood and the nurse going right, "go you in there and just pee into that thing and set it on the wee shelf and put it through", like everybody knew your business..."…"* (SU 7).

Staff also spoke of the disproportionate disturbance and time it took to juggle patients around if they were lying in an exposed area for a supposedly simple task. This was necessary to give them privacy to conduct investigations or carry out intimate care.

> *"…for example, if you want to take an elderly person to the toilet, who maybe needs a commode, so then you need to start moving that person out of the way, to put a person that was in a cubicle out into their space to move that person in to get the commode, to put them on the commode, then allow them to wash their hands, to move them back out again, to move the original patient that was in the cubicle back into the cubicle. So something that should be a simple task, for a patient, can add an extra 25 minutes, so taking somebody to the toilet may seem very simplistic, and should be something that could be done in 5 to 10 minutes, but actually that could take 25 minutes to do, and if you've got that for 4 or 5 people, you know, there's 2 hours, and actually during that time, what else do you do?"* (Nurse 7).

Privacy seemed to be a significant issue to patients and many commented how they could overhear staff discussing patients and conversations between staff and other patients as often there was only a curtain dividing them. While this did not appear to bother some others expressed their discomfort at this and the following quote highlights how this lack of privacy caused one patient to withhold medical information about their condition for fear of others overhearing.

> *"…you could still hear snippets because it's so close and you've just got a curtain between you and the next person…I wouldn't talk in a situation like that…I just wasn't willing to…in that environment...because if I said something had changed with regard to my habits they're then going to start asking me, you know, and they'll want to know more and this is in a room with a few curtains dotted here and there."* (SU 18).

Staff highlighted how the ED physical environment was designed to deal with short term patients, and not equipped for what staff described as ward care as it lacked the facilities needed to care for them adequately. Many did not have bathrooms and had very few toilets for the many often needing to use them. There were no proper beds, showers, screens or even towels available for patients.

> *"…one disabled toilet and a toilet in our short stay. So those six beds, alone, would have to share the same toilet as the five beds down in [name of area] and if we get really bad, as well, we shut our Short-Stay and we put five or six trolleys in there as well. And they have two toilets between all them people. There's no screens. There's no shower…there's no towels! I went to give somebody a shower one day in Short-Stay and apparently they done away with towels years ago…I had to give this patient a sheet to dry herself. It was terrible…"* (Nurse 3).

ED did not have enough equipment to deal with so many patients and had to make compromises. Simple things like accessing fixed oxygen points was a problem as there were insufficient in the department. Instead portable canisters had to be used that were placed on each individual patient trolley but these needed frequent checking and replacement.

> ***"****People are on the floor in the middle of trolleys, they may be attached to oxygen that is on a trolley, you have to make sure that you are checking that canister to make sure there's enough oxygen****...****so care can be compromised…"* (Nurse 13).

Many of the environmental factors in ED were not conducive for ill patients. Staff and patients both commented on how certain aspects such as the constant noise, congestion, heat and harsh artificial lighting were often difficult for some patients. Patients waiting there for extended periods for admission could not get adequate rest.

> *"It's noisy, so if you're an older patient, and it's 2 o'clock in the morning and if you've been admitted with your COPD and you're in an emergency department it's still bright, and noisy and people are talking and there's machines bombing and there's nebulisers running and so, it's very noisy and people are aware of that, so they are. So you can't really do the whole night time care…"* (Doctor 5).

Staff were conscious that the department was not always adequately cleaned. They highlighted how it was often difficult to get the environment cleaned as the pressure to get the next patient seen meant cubicles could not be left unoccupied for any period of time.

> *"…there's such a quick rapid turnover of the cubicles means that the environment is not cleaned appropriately. Priorities change in that we have to prioritise to see the patients, as opposed to getting the environment clean and tidy."* (Doctor 3).

Patients' opinion on this varied and was dependent on which ED they had attended. Those who had visited more recently constructed EDs commented on how clean and modern they felt. Those who attended other EDs however had a less satisfactory experience. They observed how the environment appeared dirty and unsterile which made them feel uncomfortable.

> *"…there was like blood on the wall and blood on the seats and I mean, it just was sort of an uncomfortable environment. You are nearly afraid of coming out with something…you're nearly afraid of catching…you nearly felt it wasn't a sterile environment…it wouldn't instil confidence. It was unsatisfactory."* (SU 22).

8.4.2 Managing and supporting staff

Senior nurses spoke of the significant pressure of being in charge of the ED. They had the responsibility of the day-to-day running of the department and were accountable for managing staff and the patient journey through ED. Understaffing and poor skill mix was an issue in most departments. Staff were tired from working extra shifts and the use of bank and agency nursing staff in all departments was common which caused problems. They were not familiar with the treatments required, the specialised ED equipment, nor had they the access codes to use them. As they did not have the skills to carry out specific treatments they tended to be allocated to look after patients waiting for beds.

> *"…we find that staff are getting tired so much, because they're doing a lot of extra shifts and things, so you end up with either agency nurses, or bank nurses, or junior staff…we wouldn't ask them to do resus, because we would feel that is completely inappropriate. I wouldn't put them on the majors side, because it's too fast moving and I think it's too hard for them to keep up and it's too easy for them to miss something with patients…I don't expect an agency nurse to know what all the patients' needs…"* (Nurse 8).

Many voiced concern about the high turnover of nursing staff. Some departments had *"new faces every week"* (Nurse 10). This high turnover appeared partly due to how nursing staff were recruited, which tended to be from a generic waiting list, regardless of their individual aspirations, experience or skills for the area. Often these jobs were temporary for sometimes as little as four weeks. As a result, ED staff felt it was a waste to invest time in training them meaning that what they could do was limited.

The turnover rate was high as staff moved on when a permanent post became available elsewhere. Even when the post was permanent many found that they were not suited to, or did not like ED work. Conversely at times staff who did like ED and managed well were moved on to a permanent post elsewhere. This had the impact of there being a constantly inexperienced junior workforce in ED.

> *"…they're appointed on temporary contract and so they're on the waiting list, they've come to A&E, and some of them are great and like A&E but suddenly a permanent post comes up in some other area and they are filtered off and a new temporary person is put in and that's not good for the people managing the floor either because they've just suddenly got somebody geared up and in fact you get some great staff who wanted to stay here but there isn't a permanent vacancy it's a temporary vacancy so that whole situation where employing people and then they're hardly here and then they're swept off…A&E is no place to send you for four weeks because in four weeks you're maybe just finding your feet and you're gone and you have another person then to bring in…"* (Nurse 10).

Temporary and new staff were not adequately trained to function in all areas of the department. The experienced nurses not only had to undertake all the skilled tasks, but also supervise the junior staff during their shift. In addition, there were usually not enough nurses on duty to allow the junior staff to shadow the experienced staff or be taught the necessary skills for progression planning.

> *"Some shifts we maybe only have two nurses who can triage and we have two triage points, so those people are stuck there all day. They are not getting to rotate anywhere else...the skill mix at times, it literally is for the Band 6 a case of looking at the off-duty to see if she can identify enough members of staff that can triage and work resus…you don't have the luxury of saying, actually you're an extra, you can go and sit with them or…we will put you in the resus today but you are an extra."* (Nurse 9).

ED staff felt that they needed to be able to rely on their colleagues to be competent and able to function effectively. The skill mix in many of the departments meant that this was not always possible and staff felt under extreme pressure working in this

environment. Many spoke of the additional strain when managing the department under these circumstances and in some cases the fear of this triggered staff to leave.

> *"A&E it's a place that you need to be quickly adaptable and you need to be confident that the people you're working with will be able to pull you out…of our staff at this minute in time that are possibly going to be coming up to be the leaders in a shift in this year, there are at least three of them who want to leave because of the fear of that…they're petrified. And you can see it in them when they come in and they suddenly realise I'm the person in charge here today and they then are looking for support from anyone that's there…that's how it should be but it's no way to come to your work and it's not safe."* (Nurse 10).

Nursing staff felt a responsibility to ensure the medical care was also appropriate and safe. They were reassured when their own senior medical staff were on duty, however, when there were new locum staff or junior doctors they felt additional pressure. The senior nurses had considerable experience and would guide these doctors, and often junior doctors would ask them for advice. Some mentioned how this responsibility was stressful for nurses who were on a significantly lower wage. There was also the additional concern of these doctors working together with junior or bank and agency nursing staff who did not have the expertise to guide them or challenge inappropriate medical care.

> *"…we've a lot of locum doctors at the moment…It takes a while to figure out how good their experience actually is…they're getting paid £50, £60, £70 an hour…and I'm not…the nurse in charge feels that there is too much responsibility put on her, which is unfair…the doctors don't know how to do things and we're trying to guide them in the right direction...which makes it difficult, because they're not technically our staff…if there's junior nurses on, and they're working on a certain side with the locum doctors…and they're not competent enough, or they're not experienced enough to know certain things…I feel I have to try and oversee what they're doing…So it's trying to protect the nurses as much as the patients…"* (Nurse 8).

Staff and patients both spoke of a shortage of doctors in ED at certain times. This was particularly apparent in the evenings and overnight with some of the smaller

departments only having one doctor on during this period. Some doctors found this situation isolating and scary. It also had the effect of some patients waiting for extensive periods to be seen by the doctor as the more seriously ill patients coming in were always the priority to be seen first.

> *"…there's not enough doctors to see the patients…You have less medical staff at night time, so the waiting times do tend to increase during the night…we'll maybe say "the doctor is coming - you are next to be seen" but then maybe a standby comes in and the doctor has to go to that. They might be in there for an hour or an hour and a half, or two hours…the patient is saying "you told me the doctor was coming to see me." You have to explain unfortunately there's been a priority case come in…it's just that they don't see the bigger picture…There is so much going on, and there's only two doctors on at one time, and then from five o'clock onwards, there's one doctor, so it can be difficult to manage…"* (Nurse 9).

Several patients commented on how things ground to a standstill while they waited to be seen by the doctor. They did not seem to understand why there were nurses who did not appear to be busy yet they were experiencing such delays in being seen. Nurses had to account to the patients for their wait yet they had little control over the causes. They appeared to be frustrated and powerless to keep the system flowing, as they had done all they could with the patient and they were waiting to see the doctor.

> *"I think the nurses were very frustrated and probably quite powerless…there appeared to be enough staff, at no time, there never seemed to be a shortage of staff, they just didn't seem to be able to move anything forward and the feeling I got was because there wasn't a doctor there to actually get the thing moving forward…"* (SU 14).

Most medical and nursing staff felt that in general ED staff worked well as a team. They felt that doctors and nurses had a supportive and close working relationship and mutual respect for one another. They felt that this was largely due to the fact that they were working together with a common aim.

> *"…I honestly can't say anything negative about the relationships in A&E because anyone who has worked here has always had a very favoursome word to say about their colleagues because it seems to be the team here that keeps everyone together, we're all very hard working, really considerate, we'll help each other out…"* (Nurse 12).

Many, however, highlighted that when staff were stressed, short-staffed and overstretched that relationships could deteriorate. When this happened there was reluctance to help each other out as each was so busy themselves. Relationships and communication broke down, and teamwork suffered.

> *"…if it's busy, staff can cope with busy, they can keep going with it. But it's when…if somebody gets frustrated, they tend to get cross and snappy. So if you're getting frustrated that actually you can't care for your patients, you get short and snappy and then that impacts on staff. So what happens is communication is going down, staff aren't communicating well, when they're not communicating well, they're not working well as a team…patient care is then being affected…"* (Nurse 7).

Staff also spoke of relationships encountered with others outside ED. The most frequently referred to was with ward staff and ED staff felt that there was a *"them and us"* attitude (Doctor 2). This appeared to centre on the fact that ED staff were bringing them work when they transferred a patient to them. ED staff felt that ward nurses acted as if they were doing ED a favour by taking these patients rather than recognising that they were part of a wider system and it was actually their job to do so. This links with *frustration with the system* (section 8.2.2), and *emphasis on government targets* (section 8.2.3), where a similar feeling was expressed. ED staff felt that ward staff showed a lack of collegiality especially since they themselves were so busy. When they brought patients the ward they were often met with hostility. Several nurses had been sent back to ED with the patient still on the trolley. What appeared to upset ED staff most was that this would take place in front of patients who were embarrassed and made to feel unwanted and a nuisance. Even when

patients had been accepted by the ward, staff met them with obstructive questioning about their care or aspects which were not relevant to their emergency care and did not impact on their need for admission.

> *"…they'll pick holes and they'll say well why have they not got their second dose of their antibiotic…or why did you not dress that leg ulcer appropriately…it's almost as like they hate us because we're bringing a patient…they have this whole attitude like, "uh, take them down there" and they'll maybe not even talk to the patient and I've had instances where I've actually had to report staff members because their attitude was disgusting and the patients actually apologised to me because the nurses on the wards had an attitude."* (Nurse 12).

The data revealed that there were particular times when staff felt that they needed additional support from their departmental managers which was often lacking. Examples of such times were following significant events such as traumatic resuscitations or being involved in aggressive or violent episodes. At these times many turned to their peers for support as it was not forthcoming from their managers. Staff spoke of the lack of formal debriefing sessions following unsuccessful traumatic resuscitations. Many felt that these would have been valuable yet these were not available and instead staff were expected to deal with this themselves. Staff spoke of being expected to move on seamlessly to the next patient following a traumatic resuscitation without any thought for their own mental well-being.

> *"…it happened with one resuscitation a member of staff said "no she's actually left the building crying"…this girl was going home alone, she had no one at home, so who was going to be the emotional support for her…you're meant just to suck it up and leave the resuscitation room and go back to the floor and start your normal activities…staff have had a traumatic resuscitation I think there should be at least a team debrief afterwards. But there's very little of that, it ends up being a lip service again."* (Nurse 11).

A similar stance was adopted to staff who were victims of aggression and violence within the department. Again, managers appeared unsupportive and instead seemed

to be detached and disinterested if staff reported this to them. Staff felt they were expected to accept what had happened and move on. The following quote from one nurse illustrates how these incidences were viewed and dealt with in some departments, leaving staff feeling unprotected and unsupported.

> *"…it happened me – I went and told my ward manager, and out of all I got was "did you fill out an IR1 form?"…there was no like "are you alright?" There was no offering of counselling, you know…it is kind of take it on the chin and get on with it."* (Nurse 4).

Being regarded as a valued team member was important to staff. Many felt that management did not value them and most expressed that they did not feel supported by the organisation. Some felt that their ward management were supportive of them however this did not extend to the higher tier of the management structure. They felt that at this level they were not recognised for the hard work that they did in difficult circumstances and many voiced their anger at this lack of support. Staff were indignant when they felt that nursing and medical managers imposed decisions and changes on them which impacted on their work without having consulted them or asked them for their opinion or advice. This left them feeling angry and not valued as an equal team member.

> *"They've introduced clinics for them next week, ENP clinics, it was never discussed with them. Their views…how do you feel about that? How do you think it should run? You know, are you able to see 3 or 4 every day?...there's one of them very, very angry about it and I think has spoken to seniors about it. I mean that worries me…if there's going to be a change that involves you, why can there not be a discussion...I suppose there's a feeling…go on and do the work, but we don't really want any of your views about the service…"* (Doctor 1).

Some of the more senior staff felt that management within the organisation were supportive of their staff. They recognised however that as they had much more exposure to staff at this level they were more aware of this. They could see how junior

staff may not be so aware as it was a multilevel organisation and these staff would not have had the same interaction with managers that more senior staff had.

> *"I have absolutely no doubt that at senior levels…they're very proud of their staff and know how hard staff work…I'm not convinced that it's always filtered down...I think if you ask very senior people, they would think that that is being done…but I would argue if you asked junior staff, they wouldn't see it. Perhaps because of the level that I'm at, and the different things that I do, I'm aware of what goes on at that very senior level. I'm not convinced a band 5 would be aware. So it gets stuck somewhere.* (Nurse 7).

8.4.3 The demands of ED and its impact on staff

Many service users referred to the extreme busyness and hectic environment that they witnessed in the ED. They described how there were many patients waiting in queues to be treated with many more arriving and still more ambulances coming. They told how there were staff rushing around between patients and appearing to be overworked.

> *"It was just hectic...a real mix of very poorly elderly people and two very young out-for-the-night and the night hasn't gone according to plan, and so there's a real mix of clientele there. I would have said it was absolutely packed out onto the corridors for the people. Ambulance bringing more in on a constant basis and staff appeared to be rushed off their feet…we were standing along the sides because it was jam packed...they were coping with a volume of people".* (SU 22).

Staff also frequently referred to how busy they were with one nurse describing them as "*running round like a blue assed fly and running round like a headless chicken"* (Nurse 4). This was due at times to the sheer numbers of patients attending, but is also closely related to the inability to move patients on in the system discussed under the subtheme of *the physical environment* in section 8.4.1. While staff felt that they could cope with being busy, at times they felt that it was beyond what they could manage. Often staff stayed late past the end of their shifts to complete episodes of

care they had started or to try to help clear a backlog of work. Many spoke of missed meals and working for long periods without tea breaks.

> *"…they were still coming in droves and there was nowhere to put them and honestly it was like a third world war zone, there were people sitting everywhere…people were frustrated, we were frustrated, we were tired, we were burnt out, we had no breaks, everyone was hungry and it was just really awful but like that's like a daily occurrence in the winter time…"* (Nurse 12).

Staff were aware that the fundamentals of care were often compromised in favour of ensuring other essentials were addressed. Many felt that the lack of staff and busyness forced them to prioritise vital care and interventions over the delivery of basic nursing care. Staff admitted to paring back care at these times due to the pressures. At this stage care became little more than monitoring or eyeballing the patient through the door and only giving care to those whose needs were immediate.

> *"It is more a case of, are they still alive, is everything alright, is there anything that they need immediately…you go from wanting to do everything to the least possible that you can do to make sure everybody is alright."* (Nurse 9).

Many staff spoke of being at breaking point and feeling like they were losing control. Times like this did not appear to be in isolation and staff referred to working on these busy shifts with some regularity. They described having to take shortcuts in some situations and admitted that they could not always adhere to the policies and procedures. In these situations, they felt vulnerable and at risk of making mistakes. Staff acknowledged that while all these aspects were significant stressors the worst one was the feeling that they themselves had compromised patient care. This was mentioned in particular by nursing staff. They spoke of the upset they felt at this as it went against everything that they had come into nursing to do.

> *"…you just feel upset. You feel depressed. You feel as if you have compromised your values. You feel nearly that you have cheated because you haven't delivered the best care that you can give. It makes you question are you doing the right job…there is bound to be an easier way to earn a wage…It goes against every grain of nursing. The reason that you came into nursing, to care for people... if you leave a shift feeling that you did a really good day, then you have that pride in your work, whereas when you are leaving thinking I didn't give the care, you're embarrassed and ashamed by your work, and that means then that you don't have pride in that…People can cope with working in ED. They can cope with the ED workload, but…when they leave, they say they are leaving because they feel they can't deliver the care that they're there to do."* (Nurse 7).

Staff spoke frequently about the pressures they worked under on a daily basis from numerous sources. They acknowledged that ED was an environment where a degree of stress was to be expected. They felt, however, that the circumstances under which they were presently expected to function was beyond what was tolerable.

> *"I think we do function well under pressure and I think we can cope with being busy and I suppose it's that tipping point that when it becomes that stress that allows you to function every day, to it tipping over into that stress, that it actually means you don't want to get out of bed in the morning, that's when it's different…I don't think you can compare it to maybe saying stress levels of other specialities perhaps, because I think we're used to a degree of stress. So I think when you're saying they're under stress, it's under an enormous amount of stress and that shouldn't be understated. I think when ED staff are saying we're at breaking point, other specialities probably would have broken a long time before, because we're used to that pressure."* (Nurse 7).

The data reveals the massive impact this stress had on staffs' professional and personal life. Staff spoke of there being low morale within the workplace and the difficulty there was in motivating people in that environment. Many spoke of dreading going into work the following day. Tiredness and fatigue was an issue yet many spoke of not being able to wind down, switch off or sleep. Many spoke of worrying about patients or decisions made earlier and some staff actually called the department in the middle of the night to check all was still well with the patients they had been with earlier.

> *"It's terrible. I go home and sometimes I can't sleep, and then I actually think about ringing in and going – is everybody okay? Is everybody still okay from the day shift that were there? And I do do that sometimes. But it takes a long time for me, for somebody to wind down I think, coming out of a day like that, and you just feel like I just don't want to go back there. You dread it, you dread going back to work."* (Nurse 3).

Staff felt that working in ED had actually changed them as a person. Some spoke of becoming more detached or harder in their manner. They felt that this came across to patients who would perceive them as being less caring than they should have been. The following two quotes represent this feeling.

> *"I think the job itself – it hardens you. It changes you, it does, it changes you…it's bad that I say I'm not as caring, but yes – I suppose it doesn't pull on your heart strings as much…"* (Nurse 4).

> *"… it is not the majority of staffs' intention to be this way and everyone can be guilty of this, it's not until it's pointed out and you stand back and you observe it, that you realise these are excellent staff that's dealing with this patient but they actually don't realise what is happening here and it's the system has made us this way…"* (Nurse 11).

For many this impacted on home life. Friendships and family suffered as staff spoke of disengaging from them due to shift work, tiredness or feeling that they couldn't understand what was going on in their lives.

> *"I just stew and by the time I get home, you just turn into this – you've held it together all day and you've turned into this completely different person where you are fed up talking to people and you want to go home and your husband or your fiancé will be sitting there waiting for you to come home and be all cheery and wanting to know how your day has been, and you'll just be like "I don't want to talk to you…I don't want to be disturbed and I just want to get into bed, because it's only seven hours until I get up and do it all over again tomorrow" and then that causes friction between me and my family…it causes arguments because you turn into this horrible grumpy person, who you are not really…I know it affects our relationship…"* (Nurse 3).

Many felt that there were long-term consequences of working under such stress. Some spoke of seeing staff crying at the end of stressful shifts. Others spoke of feeling overwhelmed, deflated or depressed and highlighted the impact that this had on their mental health.

> *"…I think they carry a lot of the psychological and emotional pressures…staff are pressurised because they can't take time off work and they burn out further and it leads to a lot of burnout and this is something that happened myself a number of years ago. I just felt that I was so under pressure, there was no senior support at all…and you just felt that you were in a hole digging deeper and deeper…going further away from the light, until eventually you just have a breakdown whilst you're on the floor working and you know yourself you actually have to leave the building."* (Nurse 11).

The long-term effect of all this was that there was a high level of both casual and long-term sick leave due to stress among nursing staff. This in turn affected staffing levels which caused even more stress for those remaining to cover shifts and workload. A lot of nurses felt that they or others close to them had in the past or were currently suffering from burnout. Many spoke of loving the job and ED being a great place to work but ultimately felt that it was just not worth the personal cost. The attrition rate from ED was high and staff spoke of ED *"haemorrhaging staff"* (Nurse 7) or leaving for a "*kinder"* place to work (Doctor 3). Several nurses interviewed revealed they had recently applied for jobs in other areas.

> *"I got offered…a job in the district, on Friday…it's a band 5, so it's down a band…I know it's not what I want to do – it's not where my passion is…I'm going to have to take a step down and go to a different area with a lot less stress…I don't feel I can carry on any longer in this role…I probably might regret what I'm doing at some point, but…when the winter starts again, and I start doing nights and the support isn't there…I'll not miss it, because my wellbeing and my health and my family are more important to me than my job at the end of the day. I love my job, and if I could stay here, I would, but it's not sustainable."* (Nurse 3).

8.5 Meeting patients' needs

This theme relates to how patients' needs were met within the Emergency Department. The theme is comprised of four subthemes of *interacting with service users, feeling forgotten and scared, involving service users' in their own care* and *care of vulnerable patients in ED*.

8.5.1 Interacting with service users

The care for service users in ED was often fragmented. Staff were aware that potentially there were many staff involved in one patient's care which involved each undertaking a series of tasks before moving on to the next patient. This meant that it was difficult for them to develop any relationship or rapport with them.

> *"…I'm taking this patient in here, I'll do their bloods, I'll do their blood pressure and then I've another ambulance there that's waiting – I'll take that, I've ear marked a cubicle on the other side of majors, I'll put that into and then I'll get one of the other nurses to take over from me, so there's not good continuity of the nurse following through from start to finish. There's like three or four of us coming in at different times, to do different things...sometimes I don't…even probably look at the patients properly, or smile at them or make eye contact or engage with them properly…Now everything is done…but there's no…interaction or good relationship or rapport."* (Nurse 3).

Service users also felt this and commented how staff popped in to do a procedure and then left making it difficult to engage with anyone in particular. The impact of this was that service users often felt that their concerns were not addressed. One service user described this as "*Everybody got a wee bit of something, but wasn't fully what you would want."* (SU 22). Many spoke of how satisfied they were that their physical needs were competently dealt with, however, they felt that staff did not take the time to address their concerns which had a real impact on their emotional wellbeing.

> *"My physical needs were looked after. Obviously as I say, I survived it. I've no complaint with that. But…the worry and the stress and the anxiety I had – if someone had of just put their hand on my shoulder and said "Look, it's going to be okay"…it was like a conveyer belt – got me in, got me stabilised – boom – ship me straight out like in a packaging company. In came the raw goods, I was packaged up and sent out and it felt just like that. For the sake of a minute, or two minutes maximum...not once was I asked "How are you feeling now"…every time they came in for blood pressure, or ECGs or to take blood it was someone different…they were afraid to strike up a conversation with you in case they were kept there that extra 30-40 seconds. That's the feeling that I got."* (SU 23).

When interactions were a positive experience, service users appeared to greatly value how they put them at ease or reassured them. Some spoke of staff chatting and joking with them or being accommodating in facilitating their stay with their relatives. In particular, relatives appreciated it when staff made the effort to engage with their loved ones. Often service users highlighted how there were one or two staff in particular that had a positive impact on them by taking that little bit extra time to connect with them and they felt that this made a tremendous difference to their experience in ED.

> *"…some people had more humanitarian aspects to their nursing than others…some just maybe had a better way with elderly people and took that wee bit extra second to have a smile or a word or whatever…there was one lady and she did a make a point of coming over a couple of times and kneeling down...into my father to speak into his ear, and she came across very caring and a very, very nice lady. Just wee things like that just seems to make a difference; especially to an older person that doesn't know what's going on…she wasn't even dealing with us...she just happened to be going past and took time and spoke…it made my father feel more at ease…it does make a difference…"* (SU 3).

Some staff readily admitted that they deliberately tried to avoid any interaction with service users at times. This happened during particularly busy periods, and was in an attempt to avoid conversation which may have led to queries which had to be dealt with, or requests for care which they did not have time to undertake. Staff admitted to

using tactics such as ignoring people or deliberately not meeting their eyes in order to prevent any communication.

> *"…I don't think anybody in the department would set out to be unhelpful or unapproachable but…the patient in resus is very, very sick, you can't afford to be caught up on something else so in that respect maybe you're kind of just tunnel vision to go and do what you need to do at that point in time and I know for a member of the public seeing you in your uniform, you're a nurse, doesn't matter where you're working, they need to speak to a nurse and they will do their best to speak to you but it's very difficult then if you get caught up in that you are then neglecting the patient who, in terms of priority, needs the care the most…and you do literally try to get from A to B and maybe avoid eye contact until you get there because you're so focused in on the task that you're doing."* (Nurse 14).

Service users were aware of staff using these tactics which one described as *"keeping themselves fireproof"* (SU 6). Some understood that they were deliberately trying to avoid them due to constraints on their time however, it also added to their sense of frustration and the feeling that staff did not care. When service users felt that staff were being dismissive or ignoring their needs some spoke of feeling frustrated and angry.

> *"At one stage actually a nurse walked past the disabled toilet as he was vomiting and I called her in and she walked on and she ignored me. I tried to make eye contact with them several times just for someone to look at the state that he was in…but I couldn't get anybody's attention…they just were not wanting to interact…the GP had said that she felt that he had acute appendicitis and that we were to tell that as soon as we got to A&E…I really for the first time ever understood why people can be violent in A&E, I felt quite violent, I felt I could be potentially quite violent, I was so angry and I was so scared and I felt so helpless…"* (SU 14).

The data revealed that aggression and violence was a problem within ED. Both staff and service users spoke of it however it featured to a greater extent in the service users' data reflecting the surprise they felt at its occurrence. Staff spoke of patients presenting with weapons such as Stanley knives, blades and hatchets.

> *"…he was with two or three prison officers. He was handcuffed for most of the time. But for some reason they took his handcuffs off and he made it into the toilet. But then a short time after that there was a noise. They called out and shouted "help". There was other police in the department looking after a different patient and they ran over, and she was like "he's got blades, he has pulled two blades"…and then the policeman phoned for backup. So at least ten other police came to the department with guns and Tasers and everything to try and resolve the situation. But that was happening in the middle of the majors area."* (Nurse 13).

Drug or alcohol consumption was often a factor adding to the unpredictability of the situation. The impact of this was significant on the department for both staff and service users. On a personal level both groups spoke of being very afraid for their and others' safety around them as the following quote shows.

> *"You're kind of worried about all the other patients because you have to look after them as well and keep them safe…it's quite scary…someone who's had drugs and they're not really in control of what they're doing, but they're kicking about, shouting and screaming; if they've got wounds…they can be squirting blood everywhere…is it potential for infection...sometimes they've got knives or things on their possession …You need to defuse that situation otherwise there is the potential for the patient to get hurt, staff to get hurt, or other patients to get hurt."* (Nurse 13).

This next quote demonstrates how it also impacted on the service which staff could deliver. During these times resources were moved towards dealing with the aggressors in a bid to treat them and remove them from the department as quickly as possible. This however impacted on the length of time others waited for their treatment.

> *"…it was a cleaner told me they were working with some nutcase a few cubicles down and that's where all the roaring and shouting is coming and I was going "What in under God is going on here?"…I just thought it was like a battle zone I was in...and if what was going on had of been in a social setting in a pub, club, bar, somewhere like that, half of those people would have been removed…it took up their time getting them moved out and then they would come back in another door and they would have to shift them out again. So they were actually being taken away from providing care…"* (SU 23).

8.5.2 Feeling forgotten and scared

Many service users spoke of feeling like they had been forgotten in ED. This appeared to be related to the lengthy periods they spent waiting to be seen without any interaction from staff. At times this happened once immediate medical assessment and vital interventions had taken place and staff had reassured themselves that the condition was not, or was no longer urgent. Staff then moved on to deal with other urgent cases as the patient's condition no longer warranted their immediate consideration. Often these patients felt that they had been relegated and forgotten in the system.

> *"…it was as if – boomph - come and stick a needle in him, give him morphine, give him muscle relaxants and that, right just leave him there…I was actually quite worried, because I couldn't shout. I was too sore. I was short of breath…I hadn't got access to a buzzer to press for a nurse or that to come. You're going "Jesus, am I, I could just lie here and die and they wouldn't know until they come past again".* (SU 23).

Some however waited for lengthy periods without even having had a medical assessment. Many of these service users were very concerned that timely intervention could improve therapeutic outcomes or prevent any deterioration, yet this was not forthcoming and they voiced how scared they had felt.

> *"…I was concerned…he'd already had a TIA a number of years ago and I thought is this, is he going for a stroke or what's happening. He was very, very confused and he was very just so out of himself, so I thought that he was quite an emergency case you know, I mean a man of 74 and he's starting to do all these things…no doctor seen him…I would have thought a doctor should have been seeing him quicker… because of the particular illness."* (SU 13).

While some service users mentioned how staff appeared to be busy others commented on how blasé the staff were and voiced their frustration at the fact that staff did not appear to be busy or concerned about their condition.

> *"…they were all just sitting there, they were probably busy like but they didn't look like they were busy and I was like "ok, when is somebody coming to me" and every now and again they would walk by and said "oh you're next to be seen"…They probably maybe were doing work at the computer or whatever but they were having the craic and having a big joke and talking away to each other."* (SU 7).

Service users spoke of the difficulty in trying to attract staffs' attention. Some spoke of hearing patient call bells going unanswered for long periods. Others called for staff under the pretext of needing help to subtly remind them they were still there. Many service users discussed how they waited for lengthy periods without essentials such as such as food or drink. They spoke of relatives leaving the department to look for food in nearby shops or using relative's coats to keep warm as they had not been given blankets.

> *"I presented to A&E physically in a pair of shorts and a vest and a pair of flip flops. But by that period it was night time and it was a lot cooler. Physically I was really cold. No-one did a welfare check saying "do you want a blanket? Do you want a cup of tea?" There was no basic checks done just about your general welfare. My sister had to go to the car and try and hoke out to see if she had any coats, jumpers in the car. I remember she had brought in a coat to put over my legs, because I was so cold, which seems absurd – that you're in a hospital with blankets, but we couldn't find anyone to pass me a blanket."* (SU 21).

Many service users voiced their exasperation at the lack of information and they received about why they were waiting. They felt that if they had been given more updates on waiting times they would have felt less frustrated and it would have allowed them to better understand why they were waiting and reassure them that they had not been forgotten in the system.

> *"…even just basic communication…if you're at an airport and your flight is delayed you're frustrated if nobody tells you anything but if people at least keep you up to date that you know what's happening it means that you're less anxious and you know that you have not been forgotten about…I felt forgotten about which is why I had to keep coming back and*

> *looking for somebody and saying my son is in the waiting room, do you know is he on a waiting list to go anywhere here because I felt that they couldn't leave somebody who looked that ill and not look about him."* (SU 14).

8.5.3 Involving service users' in their own care

Service users and staff were asked during their interviews about shared decision-making and how they felt about the degree of involvement in their own care. Some staff felt that service users were involved in decision making about their own care and in this way things had changed over the years

> *"I think medicine is moving away from what it used to be…that I'm the doctor and you're the patient…It's not "I'm the doctor, I'm telling you this." It's "well, what do you think? This is how we will move on forward"…so it is a two way stretch, and it has been for a while now."* (Nurse 6).

Others disagreed, however, and felt that while staff liked to think this, the reality was that they were only happy when the service users agreed with their decisions and plans. The perception was that staff paid lip service to the concept.

> *"I think the concept of it is present within healthcare but…you're given the choice but we already know what answer we want…it is lip service…we don't really want certain answers that conflicts with what we want, so I think we agree to the concept of it all, but in reality it doesn't happen…we really don't want families to butt in and put our plan of action out of place…I think whenever it backfires and there's a spanner thrown in from the family then quite quickly the mood changes."* (Nurse 11).

Service users' opinions were varied about the degree to which this happened. Several had not really considered it as part of what they would expect in an ED consultation. Others spoke about it in terms of being kept informed and being given information rather than being any active part of shared decision about care indicating that again it was not something that they should expect.

> *"…the A&E doctor and the surgical team when they came down fully involved us, you know, to explain, examined [name] with us there, explained what was going on, explained that the bloods had come back two hours before showing that his inflammation levels were hugely high, hence they thought he would probably need to go to surgery that night. So no, they were, we felt completely involved…".* (SU 14).

Some freely acknowledged that they did not expect to be part of the decision-making process and wanted the experts to take care of them and make the decisions on their behalf. They felt that because they had presented to ED for treatment that they were willing to accept the treatment that was decided for them.

> *"…they'll say oh you need to get an antibiotic and then they come back and they're putting it in do you know so I don't feel that Mum and Dad would actually go, oh we needed to be part of that decision because actually if you needed an antibiotic you need it and that's why we went there is to get the treatment…".* (SU 16).

Others felt that they had been given no say in their own care or treatment and decisions were made for them which they did not necessarily agree with. The quote below illustrates the frustration one patient felt at this and her reluctance to accept the decision made.

> *"…I was actually going to a wedding…and I actually was going to get a flight the day after…and he said "That's not happening, you're not going" and I was like "why" and he just said "look it's too big of a risk, you can't do it" and it just annoyed me a bit because I was like "well there must be a way around this"…and I felt like I, as a grown up woman didn't have a choice in what was happening…I felt that he was the person that was in control of it, he knew what he was doing and I was just there to receive it, is what I felt like…I'm over 18 and I should have some say in what's happening to me…"* (SU 11).

8.5.4 Care of vulnerable patients in ED

The ED experience was particularly difficult for vulnerable groups of people. Both staff and service users spoke of how the environment, staff training and way the system

operated was not conducive to the treatment of certain groups of people. A significant amount of older people attended ED and staff spoke of how their needs were often different to younger patients. They felt that they needed to be seen in a more slow-paced, relaxed environment than ED, where staff could take more time with them and deliver their care needs such as food, regular medications, toileting and skin checks.

> *"…I think they need to be treated differently…like maybe them having a separate unit where they are streamed differently and they would be getting seen quicker or might be getting seen slower but it wouldn't matter so much because they would be in an environment more conducive to them…more homely, quieter, comfortable, more people perhaps… protected from the hurly burly and away from resus…facilities for the relatives and I think there is plenty of scope for improving emergency care for the elderly"* (Doctor 6).

This was particularly true for those who were confused or had dementia. Many were sent to ED unaccompanied and it took considerable staff resources to care for and ensure the safety of these patients. Staff spoke of not having the extra time it took to constantly reassure them when they were distressed and could not understand the situation they were in. When there were few staff on duty these patients tended to be placed in areas where they were clearly visible and could be more easily observed. This however potentially added to their confusion as these were usually open busy places. It also meant that other service users were exposed to their fretfulness which some found difficult to witness.

> *"…he had Alzheimer's and he was shouting the whole time "Ahh you're hurting me, you're hurting me!!" only this was being roared…I suppose he was in a strange environment, he wasn't in his care home and it was like Piccadilly Circus…he was really troubled that gentleman…he shouted and shouted...it could have been for a lot of people very disturbing, you know that amount of noise and just the length that it went on for…they'd obviously sent his carer from the home with him but her shift finished at 8pm and she was going home…so then he wouldn't have any link…"* (SU 18).

ED was the point of contact for mental health patients yet most of these patients were not definitively treated by ED staff and required referral to mental health liaison services. Often patients waited for lengthy periods in ED for these services to arrive as they were limited in number and had large geographical areas to cover. As these service users waited in ED for their assessments they still required ongoing care. Often they waited for considerable periods while they sobered up before mental health services would see them. At times they were challenging to treat and required close supervision which was difficult for ED staff.

> *"As soon as they arrive in hospital then they decide "oh no, I don't want to be here, I want to go" and then they're obviously trying to leave or in and out for smokes or agitated. So you have to try and look out for their safety as well…they're also vulnerable because they're mentally unwell; or sometimes physically if they have taken an overdose… or done some sort of self-harm…those people sometimes need time for you to talk to them and reassure them and even though you want to you don't always have the time to be able to do that…if they've come in with a high alcohol level they would have to wait for a period of hours for that level to come down before they are medically fit to be seen by the crisis team…so they could be in A&E for a prolonged period of time and they're getting frustrated, it's uncomfortable and it's difficult to try and persuade them to stay for the length of time needed each time, or to give them the care needed."* (Nurse 13).

Some staff spoke of not feeling confident to treat these patients as they felt they had not adequate training in meeting mental health needs. This was apparent to service users who had mental health issues as they felt that staff did not adequately address these needs in ED.

> *"…I've got other – what would be described as complex medical needs, on the mental health side of things, I felt that the staff either didn't have the time - they were aware of my depression, paranoia, anxiety that I suffered because…they know what medication I was on. I'm not sure whether it was they hadn't got the time, or they weren't properly trained, or they didn't, I don't want to say they didn't want to, but they didn't address the needs and I felt that I was exacerbating the situation by worry, stressing out and being very anxious about what was happening to me."* (SU 23).

Staff spoke of caring for patients in ED at end-of-life. They felt that the ED was not an appropriate environment for this type of patient as it was difficult to find them a quiet private space for them and their family. They described patients lying on ED trolleys with their families around them in corridors or other exposed spaces due to the overcrowding in the department.

> *"…it's not the place for end of life, it is not conducive to it at all and that's because of the bottlenecks that these people can't be moved on to a side room, a ward where there's quiet and their family can be with them. It's very sad to watch it and a family just standing in the corridor because they can't have a room that is allowing them to sit with their parent or their grandmother…"* (Nurse 10).

Another aspect which staff spoke of was the difficulty in affording these people they time they felt they deserved due to the competing demands they faced. This distressed staff as they felt that they had not been able to give them the care and attention they deserved.

> *"…she kind of was passing away, Cheyne stoking. She was on an A&E trolley still. At the time there wasn't an available bed on the ward, and then we didn't really have a lot of time, there were several other things going on at once. We were trying to keep an eye on her and support the family…make sure that that patient is dying with dignity and being comfortable even though they are dying, that the family are feeling that you are looking after them and that the death of a relative is a good experience. But then you went home feeling that you didn't really get there on time and that you didn't give her the care that was needed…because you were busy with other patients or so many things going on, stop…" (participant became very emotional and gestured for recording to be stopped).* (Nurse 13).

Many service users spoke of the need to have their relatives with them to take on the role of advocate for their loved one. Some of the relatives voiced how they felt that they needed to stay to ensure the safety of their loved ones as they felt that if they had left this may not have been done by staff.

> *"…there was nobody ever really around to look after him, you know because he was confused and he was very frustrated and he didn't want the side of the cot up…and he kept thinking he was okay, "I'll get up and I'll do this" but it was just a case of because he was very confused and because I didn't feel that there was anybody to keep an eye on him...there was people lying on their own with nobody with them with doors ajar and they're just lying there and no nursing staff round them whatsoever. And I mean, it just didn't feel to me it didn't feel like a safe environment for people…"* (SU 13).

At other times relatives took over some of the basic caring and brought patients to the toilet or fetched food for them. Staff were aware that relatives often functioned in an informal carers role in ED and were grateful for the help.

> *"Like basic nursing care sometimes, like for example maybe elderly people, you know you're depending on their relatives to help, to tell you when they want to go to the toilet or to tell you whenever to come and look for you if they need something to help you know to thicken their fluids or something so that they can feed them."* (Nurse 12).

Some patients had their relatives with them as they were in the medical or nursing professions or were the experts in their care. These relatives were aware of their loved one's needs so were able to intercede on their behalf and ask for interventions and care that they may not have otherwise received had they not been there.

> *"…I said look, he's not looking right, I know being his wife and dealing with his diabetes…they checked it and it was up then to 22 point something…they told him they'd give him insulin to bring it down…he got Lantus and I said "look, that isn't the main one that he needs, he needs NovaRapid to bring the blood sugars down" and she went "oh right, I'll go away and get it for you"…If I wasn't with [name] to push things [name] wouldn't be here…They don't get the diabetes seriousness of it, I feel with him having diabetes I am on and on their back…I feel for people who don't have a family member who can speak up for them..."* (SU 22).

8.6 Summary

This chapter presented the thematic analysis of the qualitative interviews undertaken with staff and service users about their experience of care in ED. Staff felt that changes within the healthcare system had impacted greatly, resulting in a busy, chaotic, overcrowded ED environment, that was at times unable to effectively meet the needs of its service users. Role boundaries between nursing and medicine were often blurred, and nurses regularly undertook tasks considered to be within the medical domain. Staff prioritised medical-technical care and felt that basic nursing care was not something that should be delivered in ED. Relationships with staff outside ED were often problematic and there seemed to be a “them and us” culture, where ED staff felt that others did not understand their situation or help them out. Indeed, they felt that at times they actually hindered them in getting patients through the system effectively. Staff considered that working in ED was stressful, and there were high levels of burnout, sick leave and attrition. The care experience for many service users was poor and some felt that while their physical care was attended to effectively, the psychological care was lacking. The following chapter presents the integration of these stage 2 findings along with the stage 1 quantitative results.

CHAPTER 9: DISCUSSION

In order to achieve the research objectives set out in this study a mixed methods approach was adopted as discussed in chapter 4. Integration is an essential part of a mixed methods study and its central premise is that the combination of the quantitative and qualitative approaches provides a better understanding of the phenomenon under study than either approach could alone (Creswell and Plano Clark 2011). The previous four chapters have presented the findings from the quantitative and qualitative stages. This chapter presents the integrated findings from both stages to reveal the experience of person-centredness in ED from the perspective of both staff and service user. It will illustrate how relationships between constructs within the macro-context, care environment, and care processes interact to produce the current ED outcomes as experienced by staff and service users. Finally, it will also provide evidence to confirm the PCPI-S as a measure of person-centred practice within ED and present the PCPF as it is experienced within that context.

9.1 The Person-centred Practice Framework as a theoretical model within an ED context

Internationally person-centred practice is being increasingly highlighted as a tenet of excellence within healthcare provision, and its introduction into practice has been demonstrated to transform care (McCance et al. 2013; Laird et al. 2015). The literature reveals that EDs are currently experiencing many challenges and care delivery within that environment is at times compromised (Black 2014; The Regulation and Quality Improvement Authority 2014b; The Regulation and Quality Improvement Authority 2015). The aim of this study, re-stated here, was to explore person-centred practice within the ED environment and to achieve this, the following objectives were addressed:

1. To explore the relationship between attributes of nurses and doctors, their engagement in care processes and the care environment from a staff perspective.
2. To investigate how the relationships identified from objective 1 are experienced by staff and service users.
3. To psychometrically test the Person-centred Practice Inventory (staff) (PCPI-S) in relation to the ED population.

Many definitions and models of person-centred practice exist (McCance et al. 2011). This study was underpinned by a framework for person-centred practice developed by McCormack and McCance (2010, 2017). This was chosen due its comprehensiveness and ability to address the many components of person-centred practice as discussed in chapter 2. This study confirms the validity of the constructs and the directional relationships of these within the PCPF (McCormack and McCance 2017). It is the first study to provide statistical evidence of this in practice, and in particular in an ED context. As Figure 9.1 illustrates path analysis revealed that directional relationships exist between *Prerequisites* and *Care Environment* and *Prerequisites* and *Care Processes*. While the relationship between *Care Environment* and *Care Processes* is not significant it is still seen to exist and is quantifiable. Examination of the modification indices revealed a significant correlated error between *Prerequisites* and *Care Processes*.

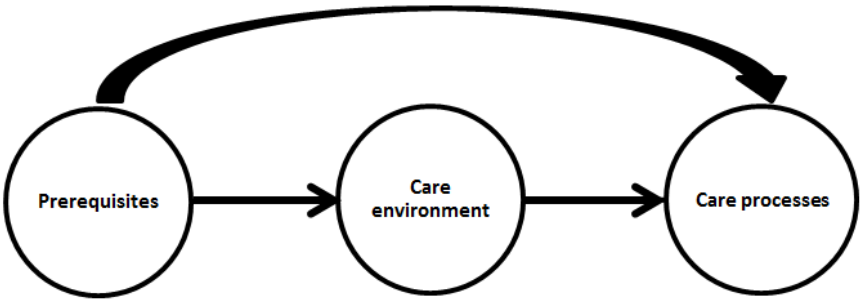

Figure 9.1: Relationships between prerequisites, care environment and care processes in the stage 1 ED data

This correlated error indicates that there is a direct relationship between these two domains which was not specified in the PCPF but has been identified in the ED data. According to Hair et al. (2010), the key issue here is for the researcher to determine what that unspecified effect is. The qualitative data was scrutinised in an attempt to explain this finding and it reveals that the macro-context may be a confounding factor in this. In particular, the interplay between the macro-context and the care environment seemed to impact greatly on the delivery of care in ED. The ED literature was not helpful in supporting or refuting this assertion as this has not been previously studied within EDs. The grey shading in Figure 9.2 depicts this interplay between the macro-context and the care environment, and its subsequent impact on staff attributes, which was not measured in stage 1 but has been revealed in the stage 2 data. This is discussed in greater detail in the subsequent sections.

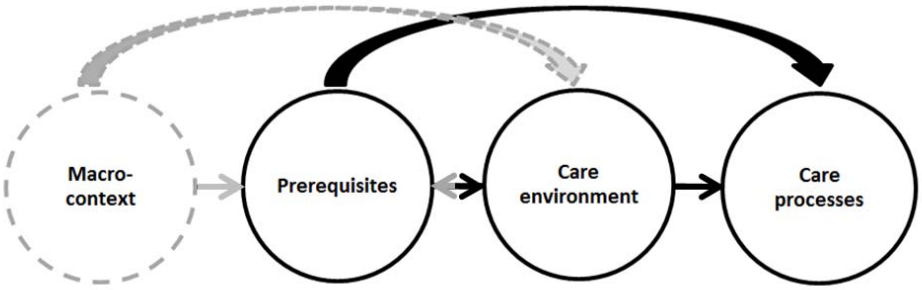

Figure 9.2: Relationships between the macro-context, prerequisites, care environment and care processes in the stage 2 ED data

9.2 The influence of the macro-context

In this study the macro-context was seen to have a negative impact on how care was delivered in ED. McCormack and McCance (2017) identify the components of the macro-context as health and social care policy, strategic frameworks, workforce developments and strategic leadership. They highlight the significance of the relationship between the political agenda and organisational strategy as the driver that brings about developments in practice. In the qualitative data participants made frequent reference to the macro-context, revealing it to have an influence on many components relating to person-centred practice in ED. The findings from this study are the first to support the inclusion of the macro-context in the restructured PCPF (McCormack and McCance 2017), as having a significant impact on the ability to deliver person-centred care in practice.

The findings in this study reveal the major impact of factors such as the rationalisation of emergency services which led to the centralisation of certain specialties and the closure of some departments. This led to increased attendances in remaining EDs and reduced patient flow through the departments due to bed shortages. Augustine (2015) states that EDs are at the interface between primary and secondary care services and are the front doors to the hospital. Therefore, changes in healthcare

policies and service delivery in either of these sectors can have significant consequences in ED. Moskop et al. (2009a) highlight how the delivery of care in the ED is reliant on a highly complex and interdependent system, which can easily become overwhelmed if any of its interdependent components are performing poorly. They state that the fact that many of these components are controlled by stakeholders and external decision-makers outside the ED means optimising patient care may not be a high priority for them.

The blurred interface between primary and secondary care and the need for all admissions to be organised through ED led to a significant increase in attendances. The requirement to meet waiting time targets dictated to a large extent how care was prioritised and organised in ED. The international literature supports this and discusses many of the aspects leading to the current situation found in this study, which Moskop et al. (2009a, 2009b) attribute to the rationing of scarce resources imposed by financial pressures and cuts. These include the steady downsizing in hospital capacity and closures of ED services (Olshaker and Rathlev 2006; Rocovich and Patel 2012; Melon et al. 2013), the over-reliance on EDs as a first point-of-care (Lyneham 2016), changes in general practice and patients' confusion over out-of-hours primary care arrangements (Benger and Jones 2008), and the inability to transfer patients out of ED (Olshaker and Rathlev 2006; Hoot and Aronsky 2008). In this study the fact that GPs did not have direct admission rights and admissions were arranged via ED had a significant impact on the numbers attending. There appears to be variation in this practice however as some ED literature discusses GP admissions, indicating that in some regions they can directly access inpatient beds (Galloway 2009; Salles et al. 2014; Cowling et al. 2016).

9.3 The impact of the macro-context on the care environment

In the quantitative results of this study, overall staff neither agreed nor disagreed that the ED care environment supported person-centred practice. Qualitatively, however, both staff and service users reported that the care environment was very challenging. Slater et al. (2017) conducted a quantitative study using the PCPI-S in acute hospital settings and found that staff felt that the care environment supported person-centred practice. Their study however did not include any staff from EDs. Scrutiny of the quantitative data in this study reveals mixed results at construct level. Three out the seven constructs scored neutrally: *shared decision-making systems*, *power sharing* and *supportive organisational systems*. The remaining four: '*skill mix'*, '*effective staff relationships'*, '*potential for innovation and risk taking'* and '*physical environment'* all scored more positively and in these aspects staff agreed that the care environment they worked in supported person-centred practice. The qualitative findings also revealed mixed responses in these areas and this is discussed in greater detail below.

9.3.1 A chaotic environment

One of the most notable findings in this study was the chaos staff and service users described in the ED physical environment. They spoke of an extremely busy environment with frequent overcrowding which was often untidy and dirty and lacked privacy, and in many cases caused concern for patient safety. The qualitative and quantitative data examined complementary aspects of the physical environment. While the qualitative findings discussed how the physical environment was actually experienced in ED, the quantitative data assessed staffs' ability to manage it for the delivery of person-centred care. An explanation for this can be found in the PCPF theory (McCormack and McCance 2017), which asserts that staff possessing person-centred attributes should be equipped to effectively manage the care environment, and therefore their perceived ability to do so is what was being measured by the PCPI-

S in stage 1. Staff responded positively with nurses scoring significantly higher than doctors in this area indicating that they were the main staff group to manage the ED physical environment. This is well supported in the qualitative findings, where nurses described the extreme effort they employed in juggling patients in a bid to maintain safety and ensure patient flow, while attempting to preserve privacy and dignity. McCormack and McCance (2017) emphasise the importance of the physical environment to care and healing. They highlight how this can be problematic to achieve as many healthcare facilities have been designed with clinical effectiveness in mind. The reality, as described in the qualitative findings of this study, however, highlight that the ED care environment could not even achieve clinical efficiency, which is also reflected in the literature. Overcrowding was frequently discussed with the main consequence being the lack of privacy and dignity (Boyle et al. 2012; Karro et al. 2005; O'Gara and Fairhurst 2004). Others also described concerns regarding infection control (Kilcoyne and Dowling 2008) and lack of necessary equipment (Kilcoyne and Dowling 2008; Person et al. 2012) all of which support the findings in this study.

9.3.2 Inadequate skill mix and staffing

Quantitatively staff agreed that the '*skill mix'* within ED supported person-centred practice. As with the '*physical environment'* construct the PCPI-S measured staffs' ability to manage the skill mix. Within this construct there was divergence at item level. While staff agreed that they could recognise deficits in the team's knowledge and skills and the impact of this on care delivery, they neither agreed nor disagreed that they were able to make the argument for a better skill mix when it fell below acceptable levels. This indicates that while staff felt that they could recognise deficits, they felt less empowered to be able to rectify this. The item *'I am able to make the case when skill mix falls below acceptable levels'* scored lowest in this construct. This item could also be considered to relate to staffs' perceived low degree of power and shared

decision-making within ED which was also scored neutrally and is discussed further in the following section.

The qualitative data expands the findings to reveal the impact of the skill mix deficits. EDs were short-staffed on a regular basis, with poor skill mix and frequent use of bank, agency and locum staff. While staff voiced concern about staffing levels what was considered perhaps more significant was the poor skill mix on duty at any one time. This study found that a major contributory factor in this was the generic recruitment policies and procedures, which led to a high nursing turnover meaning their junior workforce were inexperienced and lacked the skills and knowledge to function effectively. This may be a feature of a more local macro-context which is not replicated elsewhere, however, the literature also reveals staffing issues. Melon et al. (2013) discuss how the introduction of corporate models into healthcare has led to the establishment of minimum staffing levels and one study (Schneider et al. 2003) found that the average ED nurse cared for four patients, and the average ED doctor cared for 10 patients at once.

9.3.3 A nursing power paradox

This study found that within the PCPF '*supportive organisational systems'*, '*shared decision-making systems'* and '*power sharing'* scored lowest overall in the quantitative data and were the only constructs to score neutrally in the PCPI-S. The qualitative findings revealed that there was a power paradox at play for nurses in EDs. On one hand they felt that they were special and differed in status from nurses in other wards and departments. Their specialised skills and blurring of role boundaries with medicine meant that these nurses felt highly empowered in their role. In this study the adoption of medical tasks by ED nurses was seen as a means of elevating them in the hierarchy within their own profession and aligns with their values and beliefs of

ED nurses being a little bit different or *"special"*. They appeared to fare less well in inter-professional occupational hierarchies, however, as at times their work practices were decided for them by doctors and managers without consultation. This indicated a lack of autonomy and participation in shared decision-making systems even in relation to their own role. There is limited evidence of this in the ED literature. One study (Adriaenssens et al. 2011) found that ED nurses reported a higher opportunity for skill discretion, but lower decision authority, less adequate work procedures and less reward than other nurses. They attribute this to the fact that the demands in ED are unpredictable with a high level of decisional urgency and medical risk. This, however, was not the case in this study where the decision-making and authority did not relate to clinical risk, but to their own autonomy and role identity. More general literature suggests that powerful groups such as senior managers are the decision-makers within an organisation dictating how clinical staff work (Maitlis and Lawrence 2003). Churchman and Doherty (2010) suggest that historically nursing knowledge is based on the medical knowledge base and this reinforces the subordinate status of nurses in the doctor-nurse order, resulting in the work of other professionals being largely determined by doctors. In this study doctors scored more positively in '*power sharing', 'shared decision-making systems', 'supportive organisational systems'* and the *'potential for innovation and risk taking'* than nurses did, however, only the *'potential for innovation and risk taking'* reached statistical significance. Reflecting what is already reported in the literature (Sanders et al. 2011), this study indicates that doctors felt more able to exercise their professional accountability in decision-making than did nurses.

Nurses described having responsibility for the daily management of the ED and the staff working there. This meant that when new or locum medical staff were on duty they felt a responsibility to oversee their work to ensure decisions made about the patient were safe. Paradoxically, while they felt the responsibility to oversee and guide

them they also depended on their exclusive medical knowledge and professional autonomy in determining treatment and care for the patient before they could be moved on. Other contradictions to power also existed. The fact that ED nurses were constantly monitored by and needed to account to management for time breaches that were largely outside their control, indicates that there was close scrutiny of their daily work. Similar findings are reported in the literature where ED nurses reported consistent pressure from monitoring of their performance (Hoyle and Grant 2015) and being put under intolerable pressure and bullied to meet targets while being watched by *''Big Brother''* (Mortimore and Cooper 2007, p 403). This study revealed that some nurses felt managers forced then to compromise care when moving patients on, indicating a lack of professional autonomy and decision-making in their role. They reported feeling forced to organise care according to time rather than clinical need, which potentially compromised patient care and safety, and caused staff to experience considerable dissonance. The literature also supports how targets frequently distorted clinical priorities where those waiting longest took priority over those with more acute need (Mortimore and Cooper 2007; Weber et al. 2011; Hoyle and Grant 2015) and inappropriate disposal of patients to prevent breaching (Galloway 2009; Lyneham 2016).

McCormack and McCance (2017) consider the potential for innovation and risk taking to be an essential component of person-centred care. This makes explicit the need for autonomy and equality in relationships to ensure professional accountability in decision-making (McCormack and McCance 2010). The constraint of nurses in particular aspects of their role by medicine and management, noted in this study, highlights their relative subordinate status. The fact that this was not explicitly stated by any nurses may mean that they do not recognise this or that they are socialised into accepting this unquestioningly. This assertion is supported by the quantitative results where '*knowing self', 'clarity of beliefs and values',* and *'professional*

competence' were all impacted on negatively by this regulation of their practice, yet nurses still scored them positively. McCormack and McCance (2010) highlight how it is essential that staff are active participants in decision-making that directly impacts on their working environment in order to develop an effective team, and that professional interactions should demonstrate respect and value for all persons. This draws on '*skill mix', 'shared decision-making systems', 'effective staff relationships', 'supportive organisational systems', 'potential for innovation and risk taking'* and *'power sharing'* aspects of the *Care Environment* domain within the PCPF. The negative impact of these on '*knowing self', 'clarity of beliefs and values',* and *'professional competence'* in the *Prerequisites* domain may result in dissonance for nursing staff. Strong relationships between each of these constructs are seen here in the qualitative findings, which contribute to creating the current ED care environment.

9.3.4 Them and us

Staff generally felt that they had effective team working with their ED colleagues and medical and nursing staff appeared to work well together emphasising the common goal they worked towards. Staff admitted that these relationships could become strained when the ED became extremely overcrowded and busy, and staff became stressed. Flowerdew et al. (2012) noted how communication between staff deteriorated and management styles altered when the ED became under pressure. Staff, however, in this study reported they felt that when necessary they could rely on and support each other. The quantitative findings scored overall positively for '*effective staff relationships',* although at the low end of positive suggesting that at times there were tensions. Person et al. (2012) revealed similar findings where at times staff experienced stresses with each other, but came together effectively to work as a team in an emergency situation.

Staff relationships with others outside ED were not measured by the PCPI-S as its focus was on the interdepartmental team, however, the qualitative data revealed that these were often problematic and uncollegial. As with relationships inside ED these tended to become more strained as a result of factors such as bed shortages, busyness and time targets. Handel et al. (2010) highlighted how rigid boundaries between EDs and other hospital departments can lead to an adversarial *''us v. them''* culture (p 843) where each only considers its own flow and acts in its own best interest. This *''us v. them''* was evident in this study where ward doctors were often unwilling to attend ED to see patients there. Ward nurses appeared resentful towards ED nursing staff when they brought patients to be admitted and did not accept the admission until it was absolutely necessary to prevent a breach of the time targets. In this way relationships with others outside the ED team influenced patient flow out of ED, thereby directly impacting on the ED physical environment. ED staff felt aggrieved that ward staff did not demonstrate any sense of shared responsibility to meet time target deadlines yet they were powerless to achieve these without their help. The literature reveals similar findings. Hoyle and Grant (2015) and Mason et al. (2012) found staff outside ED were aware of targets, but did not consider that they affected them, while Weber et al. (2011) found they were a source of conflict between ED and ward nursing staff who did not accept any responsibility for meeting them. There is evidence here of the previously mentioned power paradox and lack of supportive organisational systems for ED staff in this study in that they were responsible for timely patient throughput, yet powerless to move patients on in the system without the co-operation of the rest of the organisation. The neutrally scored '*shared decision-making systems'* in the quantitative results may also reflect this as it relates to EDs staffs' participation in organisation-wide influence and decision-making which seemed to be largely ineffective. Figure 9.3 shows the impact of the macro-context in ED.

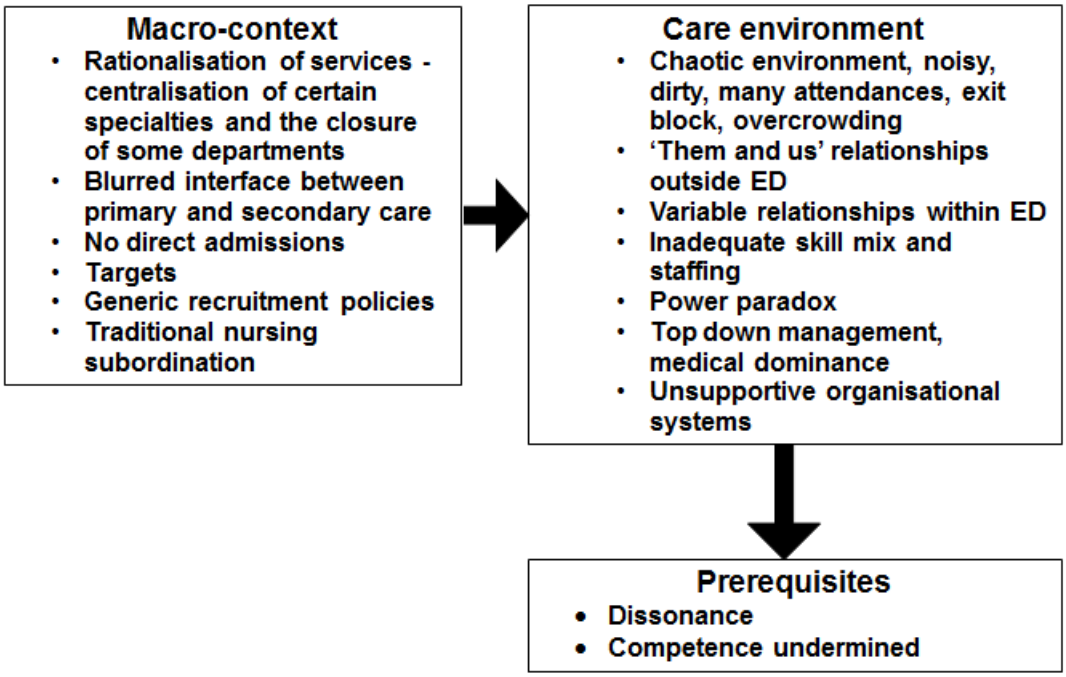

Figure 9.3: The impact of the macro-context in ED

9.4 The impact of the macro-context - care environment interplay on staff attributes

This study found that quantitatively ED staff reported they had '*clarity of beliefs and values'* revealing that ED staff had a collective set of beliefs and values that were shared by the team. The qualitative data supports this finding and expands on it to reveal that these values were focused on the fast pace and high energy of dealing with emergencies and their 'own patients' rather than facilitating person-centredness. Caring for patients who should have been treated by GPs or other agencies did not fit with this value system. Staff strived to achieve good flow and throughput in the department and became frustrated when factors outside their control prevented their patients from moving on in the system. Two studies identified similar findings. Taylor et al. (2015, p187) found ED nurses experienced difficulties caring for patient who did not *'fit'* or whose needs were incongruent with their own expectations of ED nursing. Sbaih (2002, p1346) highlighted how ED staff were sensitive to the *'shape'* of ED work

and resented the attendance of patients who could have been treated elsewhere, particularly at times when they were exceptionally busy. Sbaih (2002) connected this finding with the sociological notion of the moral categorisation of deserving and undeserving which was not evident in this study.

The work of Schein (2010) is important in understanding the motivation behind staffs' behaviour in this study. He states that culture is made up of three interdependent and interconnected levels. At surface level are the artefacts including the visible practices and traditions of the organisation that play an important symbolic role and communicate the culture to third parties. Observed behaviour is included at this level. The second level consists of the espoused beliefs and values, which represent the standards, goals and common beliefs, and offer formal and informal guidelines. The third level consists of the basic underlying assumptions comprising the unconscious, taken-for-granted beliefs that determine thinking, feelings and behaviour. Mapping the findings from this study onto Schein's (2010) three levels of culture shows how these levels related to ED values. (Refer to Table 9.1).

Table 9.1: Mapping the ED findings onto Schein's (2010) three levels of culture

1	Artefacts – observable behaviour	Staff values are not person-centred. They focus on the physical and neglect psychological aspects of care (this is discussed in more detail in section 9.4.1).
2	Espoused beliefs and values	Staff want to deliver safe, high quality care to all patients in ED.
3	Basic underlying assumptions	The function of ED is for emergency care. Medical-technical care is the priority. Staff need to ensure the care and safety of all patients in their care - this is achieved through placing the ethical principle of justice over patient autonomy and trying to ensure collective good for all ED patients over that of any individual.

Schein (2010) states that observed behaviour is very difficult to interpret as the interpretation is based on that individual's own feelings and reactions. He warns that it is important not to infer meaning onto behaviour without understanding the culture at a deeper level. What became apparent in the qualitative stage of this study was that ED staff were actually positioning the ethical principle of justice over patient autonomy and trying to ensure collective good for all patients over that of any individual. They were in fact trying to lessen and manage the impact of an extremely busy and chaotic environment by keeping all of their patients at an acceptable level of safety. This underlying notion was evident in much of their observed behaviour.

9.4.1 Medical-technical competence is valued

This study revealed the high value staff placed on competence. They scored their level of competence highly in the quantitative data, agreeing that they were professionally competent. These assertions are supported in the qualitative data, which reveals that the competence staff were actually referring to was not the professional competence McCormack and McCance (2017) speak of in person-centredness. McCormack and McCance (2017) define professional competence as the knowledge, skills and attitudes used to negotiate care options to provide holistic care. Rather in this study ED staff were referring to medical-technical competence and their ability to perform advanced level tasks. In their interviews staff described being able to multi-task effectively and appeared active in seeking to extend their competence. It was apparent that nursing staff valued blurring the boundaries with medicine and undertaking some of the roles that were previously in the medical domain. This is a finding that is well supported in the literature as Andersson et al. (2014), Kihlgren et al. (2004) and Möller et al. (2010) also identified the high value placed on medical-technical skills. Through these staff felt that they were a highly

skilled, intuitive and experienced group and were very proud of their unique set of competencies.

Andersson et al. (2014) and McCormack and McCance (2017) highlight how there is often a hierarchy of value or worth in different activities with greater value being placed on tangible, measureable activities which risks leading to the demotion of nursing care. This value set is closely aligned with the fact that they viewed the function of ED to be resuscitative and therefore this was the core set of competencies required for the role. While this is unquestionably a valid assertion and these are the life-saving skills required when dealing with ED emergencies, the fact is that not all patients attending ED required these skills, and many service users reported an unmet need of reassurance and psychological support while there. Staff prioritised these skills over psychological and basic nursing care for two reasons. Firstly, nurses placed great value on their clinical skills and had strived to develop themselves professionally in this area, believing that this was advancing their role. Indeed, this belief is encouraged and supported by a macro-context and care environment which rewards staff with increased pay and banding to undertake medicalised roles. A prime example of this is the development of the Emergency Care Advanced Clinical Practitioner (ACP) role undertaken in the UK, where nurses can undertake a curriculum developed using the Royal College of Emergency Medicine's standards of training (Royal College of Emergency Medicine 2017). In addition, these ACPs seek credentialing from the Royal College of Emergency Medicine rather than from their own nursing body. Secondly the nature of the excessively busy and chaotic care environment meant that there was not sufficient time or resources for nurses to perform anything but the basic minimum care required to keep patients safe. This will be discussed in greater detail in section 9.5.

9.4.2 The tactical use of interpersonal skills

Quantitatively staff stated that overall they had '*developed interpersonal skills'* and knew *'self'* indicating they were aware of how they behaved and communicated with others. Certain aspects of this are supported in the qualitative data which revealed that staff had very highly developed interpersonal skills which they used to great effect when necessary to send signals to service users that they were too busy to be disturbed. Self-awareness of this tactical use of interpersonal skills is well illustrated where staff described using tunnel vision to get from *"A to B"* to avoid interruptions. Service users were also aware of the use of these tactics and understood what they meant. A similar approach was described in a Swedish study (Elmqvist et al. 2012) where ED staff used body language and skilful curt responses to signal to patients that they were extremely busy and needed to keep conversation short and avoid questions.

Other aspects of the quantitative and qualitative findings reveal incongruences. Quantitative results show that staff felt that they demonstrated respect and acknowledged others' perspectives. This is in contrast to their reports of using tunnel vision and was not the impression that some service users had. Service users' felt that some staff were deliberately trying to avoid them and were being dismissive or ignoring their needs. Similar findings are seen in the ED literature where studies describe patients feeling abandoned, ignored, forgotten or unwelcome (Gordon et al. 2010; Elmqvist et al. 2011; Möller et al. 2010). Staff in this study justified their motives in that they tactically used these interpersonal skills in order to allow them to manage their busy care environment and efficiently achieve their end goal of ensuring seriously ill patients were dealt with quickly and without interruption. In this way the care environment is seen to impact on staff attributes and influence how they behave. This represents a directional flow where the *Care Environment* influences *Prerequisites* that is not indicated in the PCPF theory. Figure 9.4 shows the impact of

the macro-context - care environment interplay on the attributes of staff. Staff, however, must also accept responsibility that they themselves make decisions as professional practitioners on how to behave with patients.

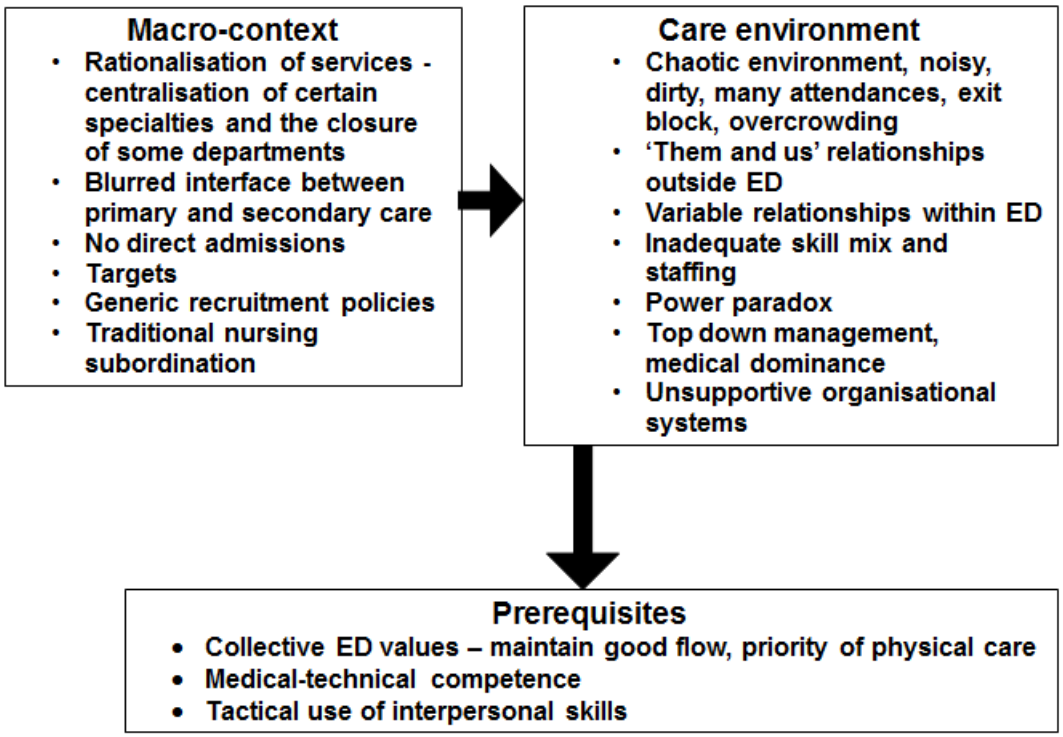

Figure 9.4: The impact of the macro-context - care environment interplay on the attributes of staff

9.5 Untended care processes

The person-centred care processes focus specifically on the service user and describes person-centred practice in relation to care delivery (McCormack and McCance 2017). In this study staff reported quantitatively that they engaged in the necessary care processes to deliver person-centred practice, although this is not supported in the qualitative findings. Some service users spoke of positive interactions with staff which they greatly appreciated, however, these were often brief and clouded by an overall poor experience. The constructs of '*working with the patient's beliefs and values*', '*being sympathetically present*', and *'providing holistic*

care', focus on getting to know the whole person and working with them to take account of more than just their physical care. These were scored positively in the quantitative results yet when staff and service users spoke of these, much of what they reported was poor. Staff spoke of the need to work with many patients at once meaning there was scant attention paid to the delivery of any person-centred care processes. Similarly, Muntlin et al's (2010, p321) study identified limited interaction with patients. They found that due to the nature of ED, care is focused on *'doing'* and getting the patient through the system as quickly as possible, as this was what was valued by the organisation. Staff in this study described eyeballing patients to check if they were still alive and only being able to do the least possible they could to make sure everyone was safe. Other studies have reported how pressure on staff to see many patients meant their work became performance focused and as a result little meaningful time was spent with each patient (Andersson et al. 2012; Khokher et al. 2009; Nugus et al. 2014), while Elmqvist et al. (2011) described how these unconnected encounters left patients feeling insecure and unable or unwilling to confide in ED staff.

The remaining components within the care processes domain related to '*engaging authentically*' and '*shared decision-making'* with patients. Overall, staff responded positively in the quantitative data that this happened, yet there was a mixed response regarding this in the qualitative findings. Some staff felt shared decision-making was something that now occurred during ED consultations, while others felt that healthcare staff paid lip service to this and paternalistic relationships were still present. Decision-making did not seem to be an issue for most service users. Many expressed no expectation of being involved in decision-making and felt that in deciding to seek health care they had indicated that they were prepared to accept the advice and treatment offered. This is in contrast to the literature where studies have shown that most patients express a strong desire to be actively involved in decision-making in

ED (Levinson et al. 2005; Robey et al. 2014; Reschke 2015). Several studies, however, highlighted that the degree to which a patient desired shared decision-making depended on what decisions were to be made. Patients wanted to be offered choices and asked opinions but many preferred to leave final decisions (Levinson et al. 2005) and decisions about diagnostic testing (Reschke 2015) to the doctor. This finding is echoed in this study where some patients voiced how they felt that staff were the experts and therefore should make the treatment decisions on their behalf.

In this study many patients equated shared decision making to being given information about their care and treatment which also suggests that there was little expectation from them to be actively involved in these decisions. Kraus and Marco (2016) suggest that there are four characteristics of shared decision-making of: patient and doctor involvement; information sharing; consensus being achieved; and finally, agreement reached. The sharing of information as seen in this study is just one component of shared-decision making yet many patients were satisfied with this. A small proportion of patients felt that they had not been listened to and had their opinions considered but these were in the minority. Engaging authentically with service users entails focusing on the interaction with them at that time based on their own values and beliefs, while shared-decision making involves developing a therapeutic relationship that acknowledges these and enables them to consider a variety of perspectives (McCormack and McCance 2017). These processes involve taking time and effort to build relationships which is not a feature of ED care in this study. Several authors highlight the unique challenges around shared decision-making in EDs due to the lack of established relationships and the fact that many decisions to be made are time dependent (Flynn et al. 2012; Kraus and Marco 2016). Reschke (2015) noted that ED patients took a more passive role than in general settings and tended to lean towards a more paternalistic model of care. A similar finding was noted by Nydén et al. (2003) who found that while patients were very

anxious to be well-informed there was no desire or expectation for them to participate in discussions about themselves. The authors suggested that these patients had accepted the healthcare culture they were present in, which included relinquishing any possibility of being an active participant in their health-related conditions. This may be why there is little evidence of any expectation of shared decision-making found in this study.

The qualitative data indicates that staff only delivered care that was focused on keeping the patient at a basic level of safety. Staff acknowledged their inattention to these care processes citing factors in the care environment such as busyness, time pressures, involvement in technical tasks and a lack of involvement in their own shared decision-making systems as hindering their ability to do so. A similar concept was identified in the literature in reference to healthcare rationing. Schubert et al. (2007, p417) used the term *'implicit rationing'* and described this as the need to withhold certain interventions from some patients due to the allocation of limited resources. This implicit rationing is an unpremeditated decision undertaken by nurses to not carry out certain activities due to limited resources (Zúñiga et al. 2015). This concept has not been previously identified in the ED literature, however, Ausserhofer et al. (2014) examined the prevalence and patterns of nursing care left undone across European hospitals. They identified that the quality of the work environment was the strongest predictor for nursing care being left undone. Quality was determined using Lake's Practice Environment Scale of the Nursing Work Index (Lake 2002), which assessed staffing and resource adequacy, nurse manager ability, leadership, support of nurses, collegial nurse-doctor relationships, nurse participation in hospital affairs, and quality issues relating to nursing education, competence, patient assessment and documentation. Reflecting the findings from this study Ausserhofer et al. (2014) found that vital tasks relating to the immediate physical needs of patients such as monitoring, administration of medications and safety measures received the highest

priority and were less likely to be omitted. Talking to patients, educating them and their families or planning received the lowest priorities and were more likely to be omitted.

The *Care Processes* domain reveals the most divergence between both sets of findings. Quantitatively staff agreed that they engaged in person-centred care processes, yet qualitatively both they and service users frequently referred to the lack of them. Here staffs' espoused practice differed greatly from their actual practice. There was no evidence of espoused values versus lived behaviour in the ED literature, however, the work of Argyris and Schön (1974) addresses this at a theoretical level. They suggest that rather than there being a divide between theory and action there are two theories involved of 'espoused theories' and 'theories-in-use'. Espoused theories are the words individuals use to convey what they would, or would like others to think they would do, under certain circumstances. Argyris and Schön (1974) also suggest that when someone is questioned as to how they would behave in a particular situation it is usually their espoused theory that they respond with. It could be considered that these may be mainly in the quantitative data as they were reported more positively than the qualitative data. In contrast theories-in-use tend to be tacit structures and are what an individual actually does in practice (Argyris and Schön 1974). The results of these are what were experienced by both staff and service users in ED. Argyris (1980) highlights how making the distinction between the two theories reveals the extent to which behaviour fits the espoused theory. The fact that staff scored positively that they had '*clarity of beliefs and values'* and that they knew *'self',* suggests that they would have been aware that their practice did not correspond with their espoused behaviours and this was evident in the divergence of findings in this study. They suggest that staff were uncomfortable with admitting that their own way of being, and caring was not what they knew it should be as healthcare professionals. Van de Mortel (2008) refers to this as social desirability response bias

and states that this is present in much self-report research. He suggests that the greater the social value there is placed on the questions the greater likelihood there is of it occurring, particularly when being asked about one's own competence or socially sensitive topics. Argyris (1980) states that when there is considerable difference between staffs' espoused theories and theories-in-use there will be dissonance. Figure 9.5 shows the impact of the macro-context, care environment and prerequisites on care processes.

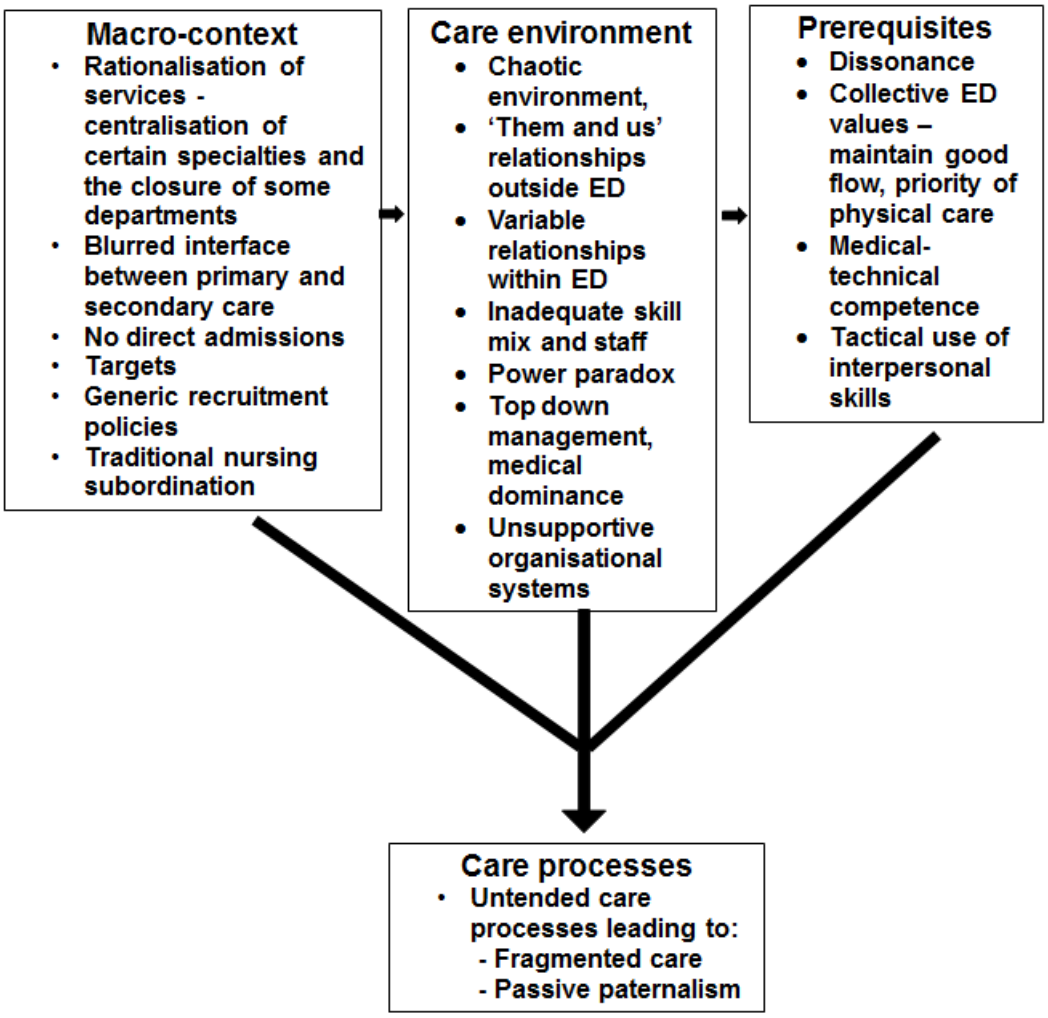

Figure 9.5: The impact of the macro context, care environment and prerequisites on care processes

9.6 The impact of ED care on person

The impact and experience of both caring and being cared for in ED for staff and service users is well documented in the literature and was a driving factor for this research to be undertaken. The discussion in this section therefore reflects much of what is already written, however, it aims to demonstrate the contributing factors that led to the care experiences in this study. Person-centred outcomes include a good experience of care, involvement in care, feeling of well-being and existence of a healthful culture (McCormack and McCance 2017). It was evident throughout this study that the experience of care in ED was poor for many staff and service users. The findings relating to these outcomes are contained in the qualitative data only.

9.6.1 Service users: a poor care experience

This study revealed that many service users experienced feeling forgotten, being ignored, and fear and anxiety during their time in ED. In addition, many felt that information that would have reassured them was not provided by staff. Gordon et al. (2010) reported a similar finding where ED patients wished for more frequent personal contact to be kept informed about what was happening. Some service users in this study felt that staff did not pay attention to their needs or concerns and at times there was a very real fear that they or their relative would deteriorate significantly while waiting for this care to come. As a result, they depended greatly on accompanying relatives to provide care or be an advocate for them in these situations. Nystrom et al. (2003b) also described a situation in which family members were forced by the system to take on the task of monitoring the patients' medical conditions and, fetching help when needed. McCormack and McCance (2010) highlight the importance of the patient feeling valued and involved in their care in creating a feeling of well-being for the delivery of person-centred practice. This was not the experience of service users in this study. Service users in this study wished for *"more"*. They felt that while their

physical care was attended to, their psychological care needs were not addressed. This appeared to be as a result of care being fragmented as service users commented on how they were tended by many different staff and these interactions were brief leaving only time for physical care. Similarly, staff also identified how the need to care for many patients simultaneously caused this situation. This is well documented in the ED literature. Andersson et al. (2012) identified how staff found it difficult to provide individualised care due to commitments of other tasks, while Elmqvist et al. (2011) identified how fragmented care left service users wanting more but being accepting of what they actually got. O'Gara and Fairhurst (2004) observed that relationship building is not a feature of the staff-patient relationship in an ED where episodes are often one-off and brief encounters. There is frequently a team approach where care can be fragmented due to competing demands on staff. Person-centred practice requires that care delivered takes consideration of the whole person to deliver a therapeutic effect and McCormack and McCance (2017) highlight that important aspects of holistic care can be achieved even while delivering routine technical and physical care. In this study some service users spoke of passing episodes of quality interaction with staff which they really appreciated and where they felt that staff were acknowledging them and being present with them. While brief, these seemed to reassure the patient that staff were caring and made them feel valued. This has not been identified in the ED literature, however McCormack et al. (2011) identified a similar phenomenon and termed these as person-centred moments. They discussed the challenge involved in moving away from these single occurrences to that of a person-centred culture. Figure 9.6 illustrates the findings from this study of the impact of the macro-context, care environment, prerequisites and care processes on outcomes for service users.

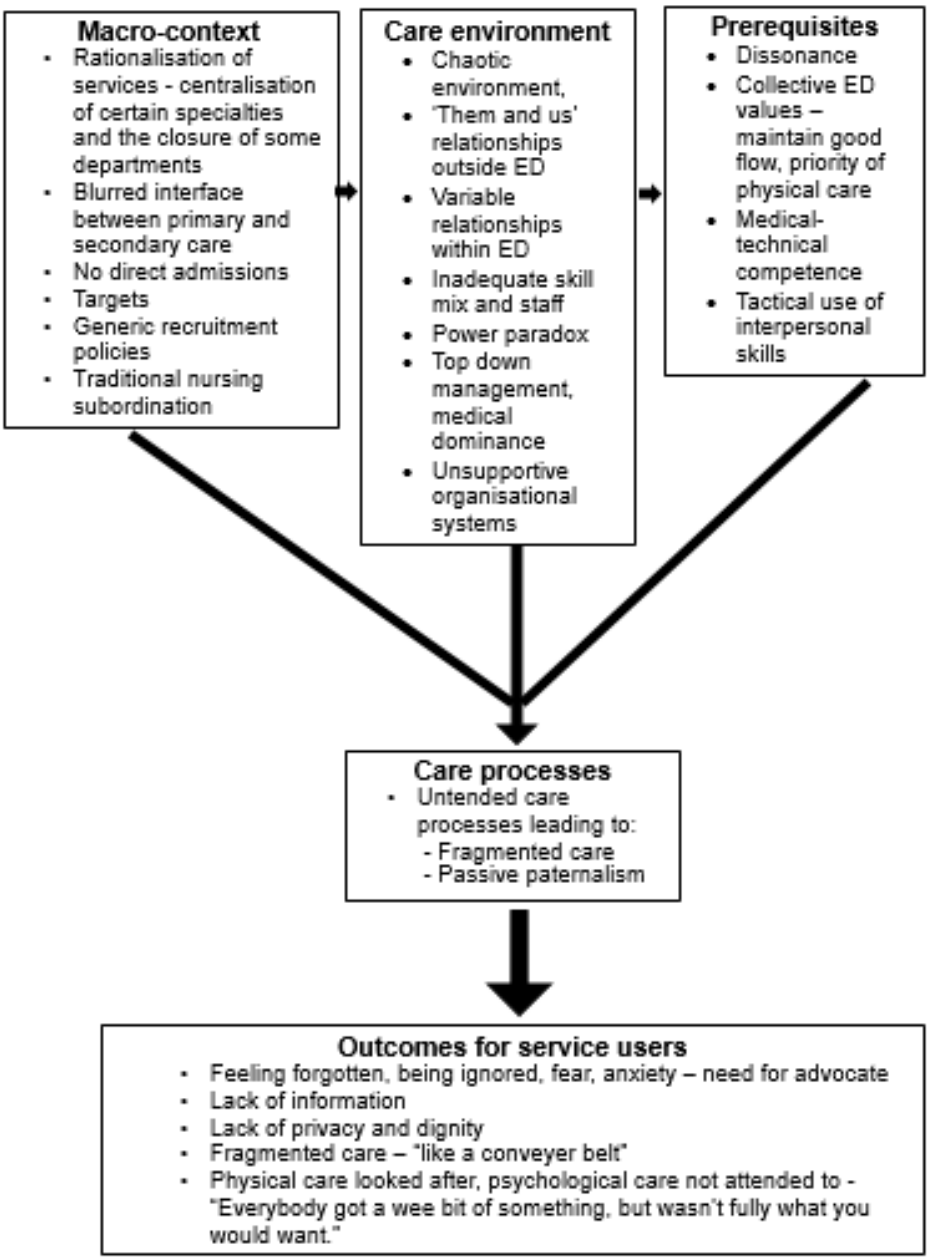

Figure 9.6: The impact of the macro-context, care environment, prerequisites and care processes on outcomes for service users

9.6.2 Staff: the personal cost to self

It became apparent during interviews with staff that they experienced a personal cost to self as a result of their working in ED (Figure 9.7). Although they spoke of loving the job and working in ED, they also spoke of frequently not being able to cope with

the stress that came with it. They felt that the excessive workload demands that were placed on them and the lack of support from the organisation left them feeling vulnerable and many stated that they were reaching *"tipping"* or *"breaking point"*. McCormack and McCance (2017) highlight the importance of feeling valued in their role as significant in fostering a feeling of well-being. The stress of working in ED is well documented in the literature however the causative factors varied from study to study. Laposa et al. (2003) found that stress created by interpersonal conflict in the workplace was a greater source of stress than organisational factors and patient care. Similarly Nielsen et al. (2013) cited poor working relationships between ED and other units as a high source of stress for ED admission nurses. This is not the finding in this study where poor staff relationships with ward staff were identified but were not considered to be a major contributory stressor. Many of the stressors identified in the studies by Bergman (2012), Flowerdew et al. (2012) and Healy and Tyrrell (2011) were identified in this study. These included overcrowding and excessive workload, inadequate staffing levels, staff conflict and lack of teamwork. This study found that the most significant stressor for staff was knowing that they had compromised patient care and the feeling that they experienced as a result of this. A similar finding was noted in a study by Nielsen et al. (2013, p507) where ED nurses cited *"too busy to do the job in the best way"* as one of the most major stressors they experienced. Kilcoyne and Dowling (2008) found that staff reported moral distress and burnout as a result of their having to act in a way that opposed their personal beliefs and values. McCormack and McCance (2017) highlight how the ability to deliver person-centred care enables a good experience of care for staff and enhances job satisfaction and retention. Instead this study found staff stating they often felt *"embarrassed and ashamed"* by their standard of work meaning they experienced negative feelings about their delivery of care. Ausserhofer et al. (2014) emphasise the impact on nurses of having to leave nursing care undone and state that it has significant outcomes for nurses' job satisfaction, intention to leave and burnout. McCormack and McCance

(2017) highlight the importance of staff being supported and enabled to deliver person-centred care in line with their values as being crucial in the existence of a healthful culture.

Staff in this study described how their perception of themselves as a person had changed as a result of working in ED. They described having become hardened and detached and feeling as if their personality had changed. They felt that as a result of their behaviour patients could perceive them as uncaring. In addition, staff also described how their work life affected their home life. Some experienced a feeling of not wanting to socialise or communicate with close friends and family when they went home. They reported not wanting to talk about their working day as they felt that others could not understand their experiences. Many reported a feeling of dread at going into work, insomnia and fretfulness about work, high rates of sick leave and attrition. These findings indicate that these staff were reporting signs of compassion fatigue and burnout. According to Hunsaker et al. (2015) these two conditions are often linked and closely mimic each other. Compassion fatigue was first identified by Joinson (1992) and used to describe the loss of the ability to nurture that she noted in some ED nurses. Boyle (2011) refers to it as a state of psychic exhaustion and asserts that ED nurses are particularly susceptible to it due to their requirement to meet patient needs in timely, rapid succession and respond to urgent and life-threatening emergencies that require complex, cognitive work in addition to providing emotional support. Detachment, feelings of alienation and estrangement, loss of interest in activities once enjoyed and withdrawal from family or friends are all symptoms experienced by staff in this study and are symptoms of compassion fatigue as described by Boyle (2011).

The term burnout refers to the experience of long-term exhaustion and diminished interest (Abdo et al. 2015). This is associated with factors within the environment such

as high patient acuity, overcrowding, workload, and managerial decision making (Hunsaker et al. (2015), all of which are experienced by the ED staff in this study. Burnout is often associated with feelings of hopelessness and an inability to perform the role effectively (Stamm 2010) and results in decreased empathic responses, withdrawal and attrition (Boyle 2011). These responses were noted in some of the staff interviewed in this study. The prevalence of compassion fatigue and burnout in ED staff is well documented in the literature (Dominguez-Gomez and Rutledge 2009; Statho-poulou et al. 2011; Hooper et al. 2010). Stichler (2009) identifies the importance of support mechanisms such as debriefing sessions and counselling within the workplace to address emotional strain and reduce compassion fatigue. This study highlighted a lack of organisational support and in particular support following emotional incidents such as sudden death in the department and aggression and violence. Unfortunately, this finding is not unique to this study and similar findings are well documented in the literature (Pinar and Ucmak 2011; Pich et al. 2011; Gilchrist et al. 2011).

McCormack and McCance (2017) highlight the need for staff to work in a healthful culture where decision-making is shared, leadership is transformational, innovative practices are supported and staff relationships are collaborative. They emphasise the importance to staff of feeling valued for their work and being enabled to deliver person-centred care to enable job satisfaction and staff retention. This study revealed staff working in an environment which did not deliver on any of these aspects which McCormack and McCance (2017) believe to be crucial for person-centred outcomes. This goes some way to explain how the experience of working in ED was such a stressful one for so many staff and had such far-reaching consequences.

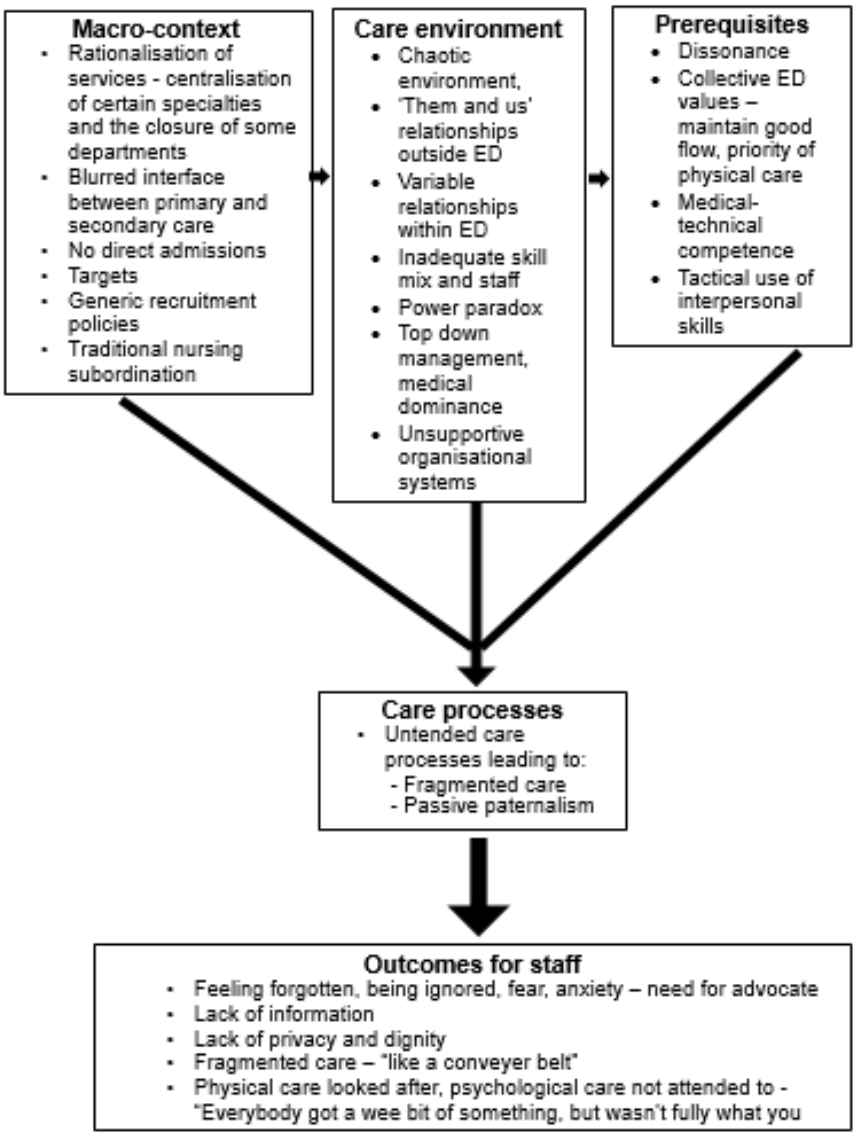

Figure 9.7: The impact of the macro-context, care environment, prerequisites and care processes on outcomes for staff

9.7 Confirmation of the PCPI-S as a measure of person-centred practice

A review by De Silva (2014) revealed the use of over 160 measurement tools of person-centred practice. A criticism of many of these tools however is that they lack explicit conceptual underpinnings and instead use outcome measures as proxy descriptors of person-centeredness (Edvardsson and Innes 2010; De Silva 2014).

The Person-centred Practice Inventory-Staff (PCPI-S) used in this study is a significant move away from the use of insensitive proxy measures or poorly mapped instruments and instead it specifically provides a measure that was developed from and is entirely aligned with the constructs of the PCPF (Slater et al. 2015). A major strength of the PCPI-S is the fact that it is derived and tested using confirmatory factor analysis which is a strong theory-driven process using a priori constructs (Streiner 2006), and in this way it has stayed close to the underpinning PCPF (Slater et al. 2017).

This study has verified the psychometric properties of the PCPI-S as a statistical measure of the PCPF (McCormack and McCance 2017). The fit statistics and factor loadings are all within acceptable levels as determined by Hair et al. (2010). A previous study by Slater et al. (2017) at the inception of the PCPI-S found it to be a psychometrically acceptable tool however this same study recommended that it be tested further in a range of settings with health professionals other than nursing staff. Edvardsson and Innes (2010) state that a limitation of tools which measure person-centred care is that many have not been used in any actual research since their development period. This study addresses these recommendations and limitations by further testing the PCPI-S measurement model in an ED setting using a sample of both medical and nursing staff.

9.8 Summary and presentation of how the PCPF is experienced in EDs

This study has demonstrated that staff believe that the components and relationships that are necessary for the delivery of person-centred practice are present in EDs, as seen from the stage 1 results. Currently, however, stage 2 reveals an environment where person-centredness is not being realised. This study reveals that this may be

due to a number of reasons. Firstly, the correlated error seen in stage 1 reveals that there is a direct relationship between *Prerequisites* and *Care Processes* that has been identified in the ED data, but is not accounted for in the PCPF theory. Scrutiny of the qualitative data suggests that this is due to the impact of the macro-context as it was seen to have a powerful compromising influence on the delivery of care in ED. Secondly how ED staffs' own value and belief systems contributed to what was prioritised in ED cannot be ignored in directing how they cared for patients. Staff placed great value on treating emergencies and nurses undertaking medical-technical clinical skills which meant that other aspects of nursing care such as psychological care was often not attended to. Finally, it needs to be considered that some of the discrepancies between the two stages may be a result of social desirability bias (Van de Mortel 2008). As in any self-report measure there is the potential for participants to present a favourable image of themselves (Johnson and Fendrich 2002). This was particularly evident in the *Care Processes* domain where most divergence was found.

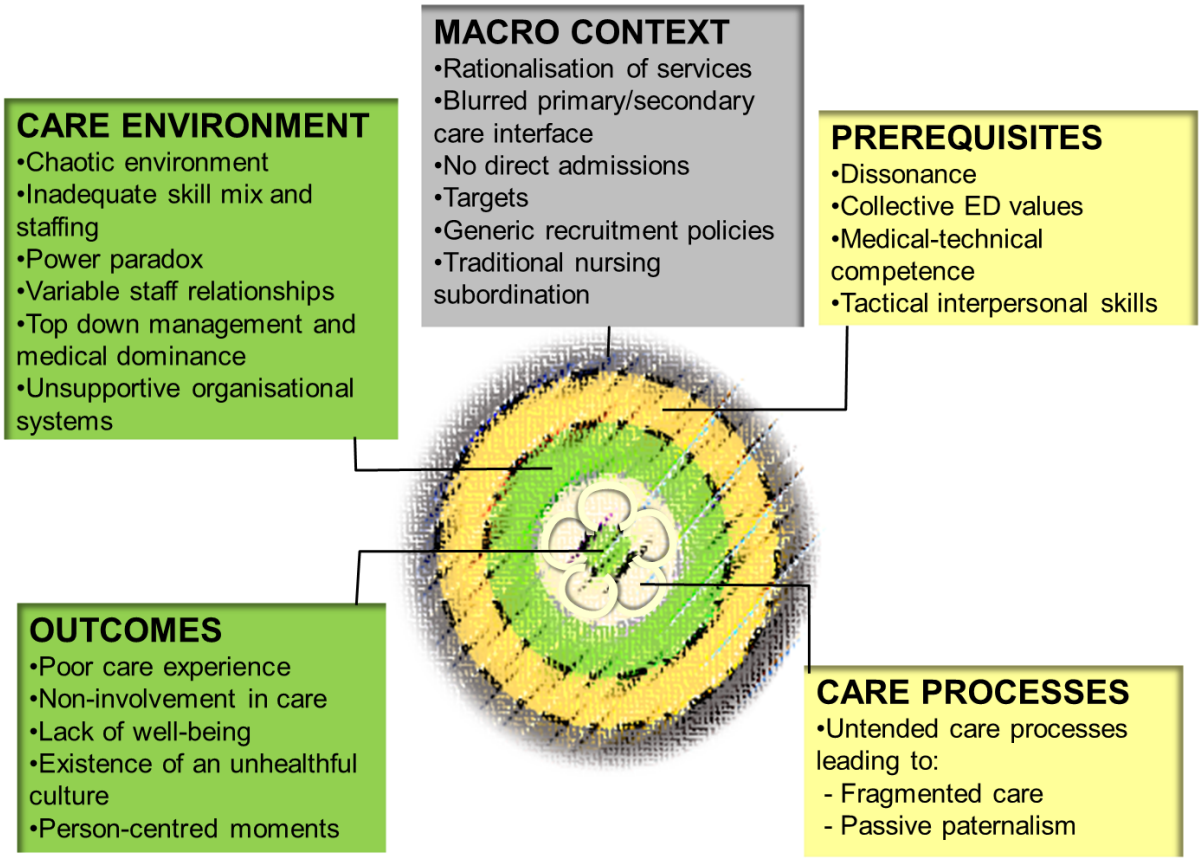

Figure 9.8: The PCPF illustrating how person-centredness is currently experienced in EDs.

Figure 9.8 depicts the results of this study mapped onto the PCPF to show how person-centredness is currently experienced in ED. The hazy background and dashed lines between the domains is depicted to show the movement of relationships back and forward between constructs both within and across domains that are found in the qualitative data. The faded petals and colour of the care processes and its outline is designed to illustrate a lack of attention to these in practice. Finally, the outcomes for both staff and service users reveal how the impact of all these components interacted and impacted on each other to produce a clearer picture of how person-centred practice is experienced in ED and gives insight into how the ED care experience is not person-centred.

CHAPTER 10: CONCLUDING CHAPTER

This chapter establishes the contribution to knowledge from this study. Implications and recommendations from the study for policy, practice and education are presented. It concludes with a personal reflection of the researcher's experiences in undertaking this PhD study.

10.1 Contribution to knowledge

The overall aim of this research was to explore person-centredness within an ED context. To identify the factors that contributed to the poor care experience reported there, this study has uncovered and analysed the components of care in EDs with those that are most affected by it – the staff and service users. Once these components were identified, it examined the relationships between them and how they all interact in that context to contribute to the overall experience of person-centredness in EDs. This addresses a gap that was identified in the literature review in chapter 2 which revealed that while individual components of person-centredness have been studied before, person-centredness as a concept has not been previously studied in an ED setting.

The overall aim was achieved through three objectives. Firstly, the relationship between attributes of nurses and doctors, their engagement in care processes and the care environment from a staff perspective was explored. This revealed that staff believed that the constructs and components of person-centeredness are present within an ED context. ED staff reported that they were person-centred and practised in a person-centred way, delivering person-centred care to service users (chapter 7). The stage 1 findings statistically confirmed the validity of the Person-centred Practice Framework and the directional relationships within it (chapters 5 and 6). In addition,

they provided statistical measures of the strength of the directional relationships between the *Prerequisites, Care Environment* and *Care Processes* in EDs. This study used the PCPI-S to measure person-centred practice (chapter 5) and the testing of this measurement instrument, addressed by objective three, has confirmed it to be an effective measure of this in EDs. This is the first time study that this instrument has been used in the ED setting. It is also the first time it has been used with health professionals other than nursing staff and demonstrates that it is transferrable across a variety of settings and staff groups.

The second objective was to investigate how the relationships identified in stage 1 were experienced by staff and service users. Stage 2 of the study identified a poor care experience for both staff and service users (chapter 8), and revealed barriers to the delivery of person-centred practice in EDs. These are practically important findings as without knowledge of what is impeding person-centredness being realised, little can be done to lessen or manage their impact. A major barrier was found to be the influence of the macro-context at all levels, and this study confirms its significance in the provision of person-centred practice in ED. The main impact was seen in the interplay between the macro-context and the care environment where the effects of the imposed strategies and policies determined how care was directed and organised. This in turn influenced how care was delivered and to some extent what staff prioritised and how they behaved. As a result, the relationships between the constructs of person-centredness in ED were at times disordered and blurred with movement seen back and forth through the framework constructs as reported in chapter 10. This study further highlights that ED staffs' own value and belief systems, which valued the priority of medical-technical care and clinical skills were also a barrier to person-centred practice, and need to be challenged. Staff spoke the rhetoric of person-centredness. They believed themselves to be person-centred and considered that they practiced in a person-centred manner, yet this study has

identified that this was not the experience in practice from either a staff or service users' perspective.

10.2 Strengths and limitations of the study

A major strength of this study is the use of a mixed methods approach. The use of the two-stage quantitative and qualitative approaches ensured that complementary aspects of the constructs were measured to give a more complete picture. In addition, stage 2 data was useful to illuminate and explain the stage 1 findings. This could not have been achieved with the use of either quantitative or qualitative studies alone as the real understanding of person-centredness in EDs came from the integration of the findings.

A further strength of this study was the representativeness of the samples in both stages. Stage 1 sample had a good combination of staff from large and smaller EDs and a range of length of experience represented. A larger percentage of nurses (48%) completed the questionnaire than doctors (27%) however, this still ensured that medical perspectives were heard. According to Fincham (2008) in surveys the representativeness of responses is more important than the response rate. A choice of completing the questionnaire on-line or in hard copy ensured that staff were not excluded by lack of information technology skills. Stage 2 ensured that the perspectives of both staff and service users were explored. Again, a mix of nurses and doctors were interviewed and a range of grades and length of time in ED were represented. The service user sample also provided a good mix of patients and relatives perspectives.

A limitation of any study is the potential for bias and there were possibilities for a number of biases within this study. Any study has the risk of non-response bias, where

a non-random subset of those invited to respond fail to participate (Polit and Beck 2012). As stated previously the researcher was happy that the samples achieved were a fair representation of the ED population therefore the likelihood of non-random response bias was lessened. As with any self-report measure this study had the potential for social desirability bias where the participants would present a favourable image of themselves (Van de Mortel 2008). Polit and Beck (2012) recommend the use of anonymity to encourage frankness and this strategy was employed in stage 1 along with an assurance of confidentiality in stage 2 in an attempt to lessen the potential for this bias.

The use of staff to approach service users to participate in interviews meant that there was the potential that they would approach only those they felt were satisfied with their care in ED. The researcher was aware of this possibility and in order to counteract this, displayed posters and leaflets in waiting rooms to also allow service users to self-select for interview. The use this dual approach was designed to lessen the possibility of selection bias which is a potential limitation.

The effect of the researcher on the data collection must be considered. As discussed in chapter 3 the researcher is known to many ED staff as she has a lengthy background in this specialty and this could be viewed as both a limitation and a strength. The researcher's professional knowledge of the ED environment ensured she had insight into the responses given. However, as acknowledged and discussed in section 3.3 the impact and influence of being familiar with the research setting and many of the participants may have influenced the process. The researcher was aware of this possibility and employed the many strategies discussed in chapter 4 to lessen this potential and ensure rigour of the study.

A further limitation which may influence the generalisability of the findings is the fact that the study was conducted in one small country. The experiences were however reflective of much of what is reported in the media in the rest of the UK and this has been placed in the context of the international literature to ensure transferability of key findings globally.

10.3 Implications from this study

This study reveals that staff engage with the concept of person-centredness and believe that they practice in this way. The fact that person-centredness is not a reality in EDs indicates that extensive work needs to be undertaken to bring about this in practice and will require a joint approach from policy, practice and education.

10.3.1 Implications for policy makers

This research has identified major issues in relation to how the macro-context shapes the ED care environment which needs to be addressed. Its considerable impact needs to be lessened or managed within EDs if person-centred practice can become a reality. There needs to be recognition that the causes and therefore the solutions to many of EDs' problems lie outside the ED. Therefore, many of the responses need to adopt a systems wide approach. Many of these require restructuring of healthcare services with significant resource and training implications, however, if we are serious about improving the quality of care in our EDs, investment in services that support and impact on EDs must be made. Direct admissions by GPs would reduce the number of referrals to EDs for admission. It would also improve the care experience for patients who lie on ED trolleys for hours waiting on a bed. This may however have the adverse impact of leaving bed shortages for those patients requiring admission from ED which would be counterproductive. Strategies designed to intervene at the primary-secondary care interfaces may address this better. Early intervention by GPs

or adequately qualified nurse practitioners in the community could prevent hospital admissions and allow many of the patients who attend EDs to be cared for at home. Adequate follow up services in the community could facilitate early discharge or reduce readmission rates. Adequate timely access to GP appointments which are available in the evenings and weekends may encourage a more appropriate use of EDs although some literature reveals that non-urgent visits are not considered a major cause of ED overcrowding (Hoot and Aronsky 2008). Some EDs already have primary care practitioners on their staff where primary care patients can be streamed to a different area thereby reducing the wait for emergency care presentations. A similar situation exists with nurse practitioners for minor injuries and illnesses. Attention needs to be given to having adequate resources including appropriate levels and numbers of these staff at peak attendance times to ensure that provision matches demand for these services.

Matching resources and demand continues to be a problem in EDs as seen by the peaks that arise at specific times. Some of the EDs in this study still reported a shortage of senior staff after 5 o'clock. Emeny and Connolly (2013) cite how senior medical staffing levels peak between 9am and 5pm, but ED activity peaks between 4pm and 9pm. Many services within the hospital close or have a limited number of on-call staff after 5pm which can increase the need for unnecessary admissions. Operating these functions on a 24 hourly, seven days per week basis could greatly reduce the bottlenecks and peaks reported in this study. In addition, early access to adequate numbers of senior medical staff could ensure that all patients receive a timely consultant or senior review and enable early senior decision making. Adequate numbers of senior staff need to be on duty throughout the 24-hour period.

The introduction of ambulance nurses or trained paramedics who can treat and discharge at the scene of an incident has been shown to be effective in some

countries (Suserud 2005; Williams 2012; Skogvold et al. 2016) and could be extended to Northern Ireland. This would require extensive investment in pre-hospital care services to set up and develop this service and the recognition of a new role here within the ambulance service. Suitable education and training programmes would need to be developed to effectively equip staff for these extended roles.

There is an urgent need for investment in the ED workforce. A regional project to establish a framework for normative nurse staffing ranges highlighted the poor staffing levels in all EDs in Northern Ireland and the need for additional staff to be employed (NIPEC 2014). This study highlighted how in particular the skill mix and extensive use of bank, agency and locum staff needs addressed. It also revealed how the generic nursing recruitment policies and allocation of staff according to their position on a waiting list, does not always provide suitable staff for ED, or allow those who wish to work in this specialty the opportunity to do so. In addition, there also needs to be sufficient numbers of doctors recruited to ensure that there is adequate medical cover on every shift. Attention needs to be given to rigorous induction and training procedures for newly appointed staff to provide confident, competent staff who can work in any area of the department when required.

One of the main causes of pressures in ED is a result of time targets. These targets are seen as an ED targets which absolves others of any responsibility in achieving them, however ED staff are incapable of meeting these targets in isolation (Weber et al. 2011). There needs to be an organisation wide approach adopted to meet these targets, as many of the obstacles ED staff face they have no control over, such as timely access to investigations and inpatient beds. Strong leadership and effective policies will be required to ensure that there is engagement from all stakeholders to meet what should be viewed as a shared vision and an organisational goal. Policies and shared guidelines should be drawn up using a multidisciplinary approach with

representation from medical and nursing ED and ward teams, bed management and diagnostic and pharmacy staff. Emphasis should be placed on principles that improve care and efficiency such as timely analgesia and rapid access to diagnostics, time deadlines for specialty doctors to attend ED and time targets for admission of a patient onto a ward bed once requested.

Time targets in themselves are a performance indicator with the potential to ensure quality timely care for service users if applied correctly (Galloway 2009; Weber et al. 2012). It is when these targets are applied absolutely and unconditionally that issues can arise. A flexibility with time targets needs to be introduced so that time breaches are permitted without fear of negative consequences if this is in the patient's best interest. Staff need to be able to make the most appropriate decision for their patients, and ensure that they are not rushed through or moved inappropriately solely to meet these targets. In addition, there needs to be a change in the mind-set of the organisation where the struggle to meet targets can result in a blame culture where staff are blamed, criticised or bullied if these are not met.

10.3.2 Implications for practice

While the above suggestions for policy will go some way to improving the clinical environment, for person-centredness to exist there needs to be a readiness to accept it in practice. It is well documented how the practice context has the greatest potential to hinder or facilitate its existence (McCormack and McCance 2017; Laird et al. 2015). Staff need to be challenged on how to manage the care environment in order to deliver person-centred care. Extensive practice development work would need to be undertaken to create an environment where person-centred practice could become a reality in ED.

Strategies designed to reduce interdepartmental conflict and tensions should be considered. In order to foster more collegial relationships potential conflict between wards and EDs departments should be addressed. Open dialogue among staff from all departments should be facilitated and a common understanding of each other's' perspectives gained. A brief period of rotation between departments to gain insight of the issues involved for each team would help facilitate a better understanding.

Stress appears to be an inevitable part of working in ED for many staff. More attention should be given to developing coping strategies to deal with this stress and in developing a self-awareness of stress and compassion fatigue and burnout. This study revealed a lack of support from the organisation in dealing with stress following critical incidents such as bereavement and aggression and violence. Employers have a duty of care to ensure that workplaces do not cause or contribute to employees' ill health. Strategies such as debriefing following critical incidents, destigmatising, and highlighting the free and confidential benefits of occupational health and counselling services may encourage staff to feel they can be open about the stress they are experiencing. Staff in this study identified the benefit of colleagues in supporting them, and peer support sessions could be used as a more formal way of dealing with stress in the workplace.

The findings of this study provide a basis for questioning much of what is accepted practice in the ED. The power paradox that is present for nurses is a difficult issue to address as it involves addressing age-old hierarchal structures. Managers and medical staff need to confer the autonomy to nursing staff that goes with the role if they are to be allowed to work to their full potential. This would require widespread changes to traditional ways of working. The top-down management approach needs to be replaced with a more collaborative one where staff are supported and listened to, and feel involved in decision-making about their own work practices. There should

be multi-professional team meetings and open lines of communication with management where all staff are listened to and power sharing is encouraged and fostered.

10.3.3 Implications for education

Education needs to focus on more than mandatory training and technical skills for ED staff. Staff need access to training on working with particular groups of patients such as those with dementia, general mental health conditions and those who self-harm, as many currently feel ill-equipped to deal with these presentations. Staff need access to content on person-centred approaches to care and to be supported and facilitated in programmes designed to deliver person-centred care. This should be incorporated into emergency care course provision.

This study highlighted the impact of ineffective communication between staff and service users. Strategies to raise awareness of how this lack of interaction affects the service users' experience should be highlighted to staff. This could be addressed by incorporating service user involvement in all nursing and medical educational programmes at both pre and post registration levels. The inclusion of an awareness of person-centred approaches in ED should be an integral part of all ED education.

For staff not undertaking educational courses there should be opportunities in the form of study days or masterclasses for them to be introduced to the concept of person-centred practice. Person-centredness will not become a reality in EDs unless staff accept its value and realise how it could improve the care experience for both them and their patients. Staff should be facilitated to identify their own personal values and beliefs. These should then be challenged to consider how their own value and beliefs system impacts on their practice and how this could be modified. From this

starting point the principle of person-centred practice, and how it can be incorporated into their practice could be introduced.

10.3.4 Implications for further research

This study has made a contribution to the body of knowledge on person-centredness. It highlights its absence within the ED environment, and identifies barriers such as the macro-context, and staffs' personal values and beliefs. Future research could address why the impact of the macro-context is felt so strongly in EDs and focus on ways that this influence could be lessened. Solman and Wilson (2017) recognise how the impact of the organisational culture coupled with the values and beliefs of staff can create immunity to change. They highlight the need for effective strategic leadership to challenge staff to think and behave differently in how they engage with their work, each other and the patient. While this study highlighted the considerable effort that ED staff made to manage their environment there was no evidence of any such strategic leadership within ED. Future research should focus on how staff could be developed as leaders in their own areas to enable them to realise person-centred practice in EDs.

This study revealed the complex and multi-dimensional nature of relationships that exist between staff in ED. Future research could focus on the power dynamics seen in this study between nursing and medical staff in ED. In addition the perspective of managers within the organisation should be explored as they were revealed as a powerful dynamic in how care was delivered in ED in this study.

The PCPF has underpinned studies in a wide range of healthcare settings and expansion of it to recognise the impact of the macro-context has been a recent development. This study supports this inclusion. A number of instruments have been

developed through ongoing studies which identify key processes in the development of person-centred practice and its outcomes (McCormack and McCance 2017). The PCPI-S used in this study is one such instrument. The researcher is aware that this is currently being adapted for use with unqualified healthcare workers and service users and research is needed to validate the developing instruments. While this study has added strength to the validation of the PCPI-S as a measure of person-centred practice, future research is needed to further validate the instrument in other healthcare contexts and with other professions.

10.4 A personal reflection

My original plan for my PhD was to undertake a study that would involve a practice development intervention to facilitate the development of person-centredness in the ED I had previously worked in. I knew its implementation could improve the quality of care for staff and service users and I felt that it would be of great benefit there. It became apparent however that the current climate there would not be receptive to this type of intervention as it was a particularly troubled and stressful environment at that time. Along with my supervisory team I decided that there was still considerable groundwork needed to evaluate the suitability of the ED environment for any practice development intervention. I had no knowledge how the many components of person-centredness interacted with each other and were experienced by staff and service users in ED. I decided that this needed to be explored and established before any targeted intervention could be planned and so this study was devised to do that.

Initially I planned to undertake a two stage quantitative and qualitative study to address the objectives. One week prior to my first seminar I attended a Qualitative Research Summer School where I had been offered an additional free session due to an administrative error. I opted for a session on mixed methods which, as one of my

supervisors said, would help me justify “why my study was not mixed methods”. The session was excellent and very quickly I realised that my study needed to adopt a mixed methods approach. The findings from stage 1 would inform stage 2, and stage 2 would elaborate on and help explain stage 1 results. In addition, the integration of the two stages would allow me to gain insights not achievable from each stage standing alone. I had to quickly contact my supervisors and assessors that evening and gain permission to change the seminar paperwork which had already been submitted. I knew I would be challenged about this late and sudden change to my methodology at the seminar and so I read extensively around mixed methods. I needed to be able to defend why my study needed this approach rather than one that used a combination of different methods that were not integrated. I remain convinced in the value of this approach and firmly believe that it was the most comprehensive one I could have used for this topic.

Perhaps my biggest achievement in all of this was in completing the quantitative stage of the study. Prior to this I had a very limited understanding of quantitative research or even its associated terminology, especially in relation to statistics. When reading quantitative papers, I scanned over the statistical results and went straight to the discussion section where these would be explained for me. I knew I needed to gain an understanding of the different statistical tests I was using and the significance of my own data so I enrolled on and attended a Quantitative Research Summer School. I now realise I did this too early on in my study. I would have greatly benefitted from having had some data to analyse at the time as this would have allowed me to understand the concepts better and how to apply them to my own study. By the time I came to my own statistical analysis much of what I had learned was forgotten. Despite this I have now gained a much greater understanding of various statistical tests by reading extensively around them and participating in practical sessions with

a statistician. I can now confidently explain the tests used and the results produced from them in this study.

Prior to implementing the study, I visited each of the 11 EDs involved to speak about what I hoped to achieve from the research and what participation I was asking from staff. This was time-consuming but I believe it was time well-spent. While I do not know the actual impact it had on response rates I feel that it did ensure that when the questionnaire arrived for staff many were informed enough to not just ignore it. Despite this however I did encounter some challenges. Written feedback from stage 1 was compiled and printed and sent to every doctor and nurse working in EDs prior to stage 2 commencing. This was designed to be a thank you for those who had completed stage 1 and encourage participation in stage 2. This was quite costly and with hindsight may have had limited impact. What I found in many cases was that the staff I interviewed in stage 2 had not read it or had merely glanced at it without taking in its content. In future studies I will consider alternative strategies for dissemination of findings such as attending staff meetings and relaying the feedback in person or presenting it in a poster format for display in each staff room.

This study showed me the value of having ‘unofficial champions’ within each department. These staff were not necessarily the department managers and were often someone I previously knew either professionally or personally. These ‘champions’ took responsibility for ensuring the questionnaires were distributed, reminding colleagues about the study and/or recruiting service users for the study. Without such individuals I have no doubt my response rate would have been considerably lower. I feel that being known within the relatively small ED network was a definite advantage as many agreed to promote my study because they wanted to help a friend or ex-colleague. Equally I needed to be sure that no one felt pressurised into taking part because of that relationship and the use of strategies such as an

intermediary, anonymity and confidentiality helped ensure this. With hindsight I have come to realise the value in Information Technology such as Facebook and Twitter in communicating and promoting events and studies. The ED community has a vibrant presence on such forums which I could have used much more effectively both to promote the study and post a link to the stage 1 questionnaire on. In any future research it will be something I will definitely consider.

As an ED nurse of 19 years' I have had many experiences which had the potential to cloud my vision. I recognise that in many ways I had preconceived ideas about what I would find from this research. I remember feeling surprised that the stage 1 results found that ED staff felt that they were person-centred and delivered person-centred care. I had never considered ED to be a person-centred environment and I believed that most ED staff felt the same. Over time I have learned to recognise my pre-conceptions and have worked hard to keep an open mind. My learning of the research process along the way and the need to demonstrate rigour in this has helped tremendously. I have learned to be patient and interpret the data objectively. The help of my supervisors was invaluable in this as with each being from different backgrounds they were able to challenge my thinking to consider alternative perspectives. A prime example of this was when I was disconcerted by the contradictory findings in stage 1 and 2 of the study. As stage 2 findings reflected much of what had been my own personal experiences in ED, and also what was being portrayed in the literature and the media, I concluded that in this stage participants were telling the truth. I assumed that as stage 1 showed contrasting findings that the components of person-centredness were present in ED, staff must have been less truthful in this. I wrote a whole draft chapter on the integration of the datasets based on this supposition. At supervision I was challenged by my supervisors to think again about how I had interpreted the findings. I had discounted a whole significant stage of the study because I felt it did not fit in with my understanding. The statistician in

particular challenged me to look though a lens that accepted that statistically staff had reported that the components of person-centredness were present within ED. Equipped with this alternative interpretation of the data the researcher could then make sense of the qualitative findings and both datasets could exist as complementary findings.

The hardest chapter I wrote in this thesis has undoubtedly been the discussion chapter. My approach to the analysis of this mixed methods study meant that following analysis of each individual stage I then needed to re-examine both datasets and reconceptualise them in light of the other's findings. This required that I step back and try to think differently about what I had previously analysed. I found this a very difficult exercise and kept recreating variations of the same themes as before. In addition, I found it difficult to keep my enthusiasm going as I felt that I had already spent a significant amount of time and effort in data analysis and was anxious to complete this stage. I had underestimated the considerable time and energy that this required and had not really planned for this additional effort. Having now completed this I will not underestimate the input required for this stage of a mixed methods study again.

The biggest challenge for me by far during the course of this study has been in my personal life. My parents were both very proud when I started this PhD and I remember my mother joking how six years was a long time and she hoped they'd both still be here for the graduation! I never for a minute considered that there was a possibility that one of them would be still here but not actually know who I am. During the course of those six years my father has developed dementia and is in now in the advanced stages of the disease. The need to juggle a full time job, study, and have an input in caring has proved difficult practically but more so emotionally. I know however that had my dad the mental capacity to understand as he used to, he would be very proud of what I have achieved in this.

10.5 Conclusion

This study began with my interest in exploring the concept of person-centredness within EDs. It has been successful in identifying that staff report that the necessary components and relationships for person-centredness are present within ED. Staff believe that they are person-centred and practice in a person-centred manner. The study has also identified a number of issues that prevent person-centredness being realised there. If person-centred care is to become a reality in EDs it will require a focused approach, targeting those areas that have been identified as inhibiting its development. It is hoped that the findings from this study will help to achieve that to become a reality.

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Appendix 1

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REVIEW

Exploring person-centredness in emergency departments: A literature review

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ABSTRACT

Person-centred approaches to care delivery have been increasingly promoted in international policy and strategy, but despite this there is evidence of failings within healthcare systems that negatively impact on the care experience for patients and staff. This paper explores the international literature on person-centredness within emergency departments (EDs). The Person-centred Practice Framework was used as the underpinning theoretical framework. This theory contends that staff must possess certain attributes to manage the care environment appropriately to deliver effective care processes in order to achieve effective person-centred outcomes for patients and staff. An initial search of the literature identified no relevant papers that discussed person-centredness as a concept within EDs. A further search using terms drawn from a definition of person-centredness revealed literature that reflected components of person-centredness. Themes that emerged included medical-technical intervention, a culture of worthiness, managing the patient journey, nurse/doctor relationships, patients' and relatives' experience of care, and ED as a stressful environment. The themes can be mapped onto the Person-centred Practice Framework, suggesting that components of person-centred practice have emerged from studies in a fragmented fashion, without consideration of person-centredness as a whole within an ED context.

1. Introduction

Person-centred approaches to care delivery have been increasingly promoted in international policy and strategy over the last decade as a means of enhancing standards of care (Laird et al., 2015). Its translation into care delivery has been proven to have a positive impact on patients and staff (McCormack and McCance, 2010). Improving the patient experience is concerned with more than just good clinical care. It includes being cared for with kindness, compassion and respect (Goodrich and Cornwell, 2008). According to McCance et al. (2013), this emphasises the need to focus on attitudes, behaviours and relationships that reflect the importance of working in ways that support a person-centred approach and puts the patient at the centre of care delivery.

2. Background

Despite the apparent drive towards a person-centred approach, recent enquiries in the United Kingdom (UK) have revealed substantial failings within the healthcare system that have had significant impact on the quality of patient care (Berwick, 2013; Francis, 2013). These reports highlighted inadequate communication, acceptance of poor standards and a culture that focused on systems rather than patients. Despite lessons that should have been learned from these enquiries, care remains inadequate, and recent reports from emergency departments (EDs) highlight overcrowding, medical errors, prolonged delays in the treatment of pain and suffering, lengthy waiting times, and patient and staff dissatisfaction (Canadian Association of Emergency Physicians, 2015). Within the UK the ED experience continues to dominate the media with headlines portraying an environment that is the antithesis of person-centred care, for example, *"A&E units have become like warzones"* (The Telegraph, 2013), *"Cancer patients 26 hours of hell on earth in A&E"* (Belfast Telegraph, 2015) and *"Porter 'fed up of seeing nurses crying' over A&E problems"* (BBC News Online, 2014).

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2.1. Person-centredness as a concept

Person-centredness describes a standard of care that places persons at the centre of it by moving away from fragmented medically dominated care towards care that is relationship-focused, holistic, and collaborative (McCance et al., 2011). McCormack and McCance (2010) developed the Person-centred Practice Framework, which essentially comprises four domains: *prerequisites*, which focus on the attributes of staff; *the care environment*, which focuses on the context in which care is delivered; *person-centred processes*, which focus on delivering care through a range of activities; and *expected outcomes*, which are the results of effective person-centred nursing (McCormack and McCance, 2010).

McCormack and McCance (2010) define person-centredness within nursing as

> *"An approach to practice established through the formation and fostering of therapeutic relationships between all care providers, service users and others significant to them in their lives. It is underpinned by values of respect for persons, individual right to self-determination, mutual respect and understanding. It is enabled by cultures of empowerment that foster continuous approaches to practice development"* (p. 13).

This paper aims to explore the international literature on person-centredness within emergency departments.

3. Methods

The databases Proquest, Cumulative Index to Nursing and Allied Health (CINAHL), Medline Ovid, and Embase were initially searched using keywords shown in Table 1a. The inclusion period was January 2002 to February 2014. This revealed a dearth of relevant literature highlighting the lack of research in this area and therefore the need for a change in search strategy. A further search was conducted using keywords shown in Table 1b, which are based on the core components of person-centredness and the above definition. The search was limited to articles published in English, relating to humans and adult age group.

The literature was reviewed by title, abstract, and then full-text by the lead author for inclusion. Studies were included if they were published in peer-reviewed journals, empirically based and focused on key person-centred aspects in ED. Reference lists were scanned for relevant literature (Fig. 1). A total of 39 articles were identified. These studies were assessed for quality using the Critical Appraisal Skills Programme (CASP) 2014 and all were retained for inclusion. The findings are presented in Table 2. The literature was varied in terms of country of origin, giving a range of findings from different health care systems and cultures. The selected studies were evaluated using thematic analysis, by the lead author, to identify themes that were pertinent to person-centred practice, and the results were checked for final consensus by all authors.

Table 1
Search strategy.

(a) Initial search strategy			
Keywords	Person centred Patient centred Client centred	AND	Accident and Emergency Emergency department Emergency room
(b) Further search strategy			
Keywords	Experience of care Values Beliefs Shared decision making Caring Culture Engagement Therapeutic relationships	AND	Accident and Emergency Emergency department Emergency room

4. Results

Analysis of the literature revealed six themes that could be described as characteristic of components of person-centredness within ED. These were medical-technical intervention, a culture of worthiness, managing the patient journey, nurse/doctor relationships, patients' and relatives' experience of care, and a stressful environment.

4.1. Medical-technical intervention

Kihlgren et al. (2004), Muntlin et al. (2010), and Winman and Wikblad (2004) all revealed a common finding of a medical-technical environment where value was placed on technology, medical status and patient throughput over caring. Two studies (Elmqvist et al., 2012; Person et al., 2012) highlighted how this was a cultural norm which ED staff employed to help them cope with working in an unpredictable, stressful environment. Nyström et al. (2003) referred to this as conveyor belt style nursing. ED staff viewed the purpose of their role as one of saving lives, and felt that they were there to deal with emergencies and acutely ill patients, which they found rewarding and exciting (Elmqvist et al., 2012; Nyström, 2002; Person et al., 2012). Winman and Wikblad (2004) found that interactions with patients were mostly undertaken when carrying out medical tasks or undertaking doctor's instructions. The high value placed on performing medical tasks meant that nursing care had become an extension of medical care with nursing expertise not being perceived as important by ED nurses (Möller et al., 2010; Nyström et al., 2003). This was reinforced by a number of studies that found that when ED nurses spoke of expertise and competence, they were referring to highly developed technical skills and medical tasks rather than competence in caring (Nyström, 2002; Nyström et al., 2003; Winman and Wikblad, 2004).

Nyström (2002) found that ED nurses had become totally involved in the paradigm of medicine and did not even recognise the nursing paradigm. An example of this attitude was found in a Swedish study involving twenty patients aged over 75 years (Kihlgren et al., 2005, p. 605) where a nurse stated:

> *"It is difficult with nursing care. It is secondary for me as I am working in an ED. . .. . . We are not good at giving nursing care. We are trained in acute care, giving nursing care does not come automatically."*

4.2. A culture of worthiness

The literature also identified a belief system where patients were valued for their legitimacy to be treated within the ED. Elmqvist et al. (2012) identified that ED staff were always in readiness for lifesaving and described their work as running in a sprint race, performing quick measures for acutely ill patients. Some patient groups, however, presented a challenge for ED staff. Studies from Sweden, USA and UK all found that those with minor or routine complaints or conditions that could have been treated elsewhere were a frustration to staff and caused feelings of resentment (Muntlin et al., 2010; Person et al., 2012; Sbaih, 2002) and took their attention away from the job of saving lives. Such patients were referred to in terms of *"regulars"* (Bergman, 2012, p. 222) and having *"banal complaints"* (Nyström, 2002, p. 415). Other studies identified that caring for those with end-of-life needs (Bailey et al., 2011; Smith et al.,

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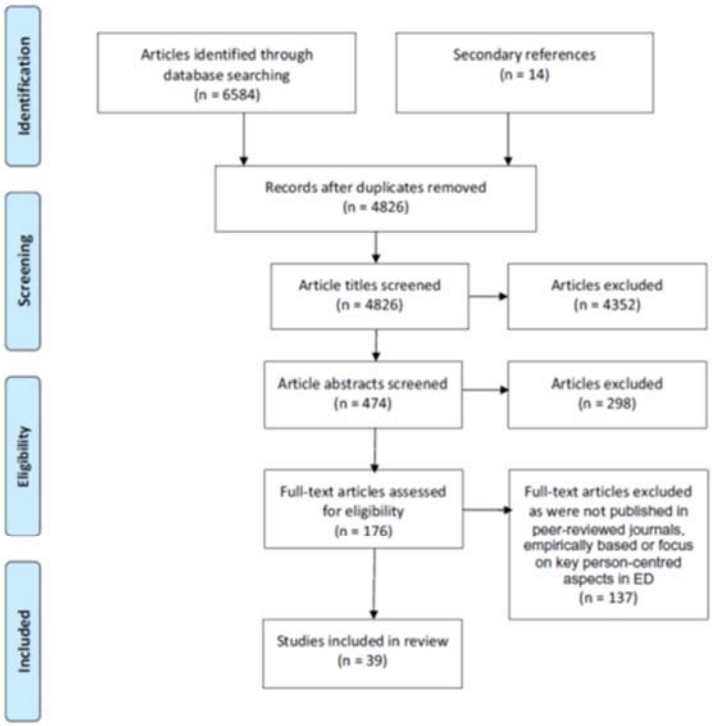

Fig. 1. Prisma flow diagram of literature selection process.

2009) and mental health needs (Marynowski-Traczyk and Broadbent, 2011; Wright et al., 2003) was in conflict with the ED culture.

Two ethnographic studies undertaken by Fry (2012) in Australia and Hillman (2014) in the UK found that staff held collective beliefs about which patients were considered worthy of ED care. Fry referred to patients who were *"right"* and *"good"* (p. 124), while Hillman (2014, p. 487) termed them as *"legitimate"* patients. Patients attending who breached these beliefs caused resentment, which could result in negative consequences for them, such as increased waiting times. For example nurses in Fry's (2012, p. 123) study referred to a *"positive bag sign"*:

> *"you have a positive bag sign, when I see the ambulance pull up and the bag's on the trolley. I just immediately think, right, you're in the waiting room."*

They believed that these patients came with the expectation of being ill enough to bypass the waiting room and go straight into the ED or a hospital bed. In contrast, however, nurses felt if they were well enough to organise packing a bag they were unlikely to be acutely unwell and could therefore take their place in the queue with the rest, unless staff deemed otherwise. While from an outsider's perspective this may appear to be based on staffs' value judgement of what they deemed to be worthy, researchers found that their attitudes were driven by notions of safety, respect and equity. This view is supported in an earlier study (Sbaih, 2002) which found that similar attitudes derived from staffs' desire to ensure safe and effective care for those who really needed it rather than any moral judgement of worth.

4.3. Managing the patient journey through ED

The literature revealed that nursing staff had management responsibility within EDs; however, they appeared to have very little control over their environment. A number of studies revealed that the emphasis was on getting the patient through the department as quickly as possible (Muntlin et al., 2010; Nugus et al., 2014; Sanders et al., 2011); however, processes both within and outside the ED impacted on their ability to do this. ED staff were at the mercy of other departments to allow them to transfer patients for admission or treatment (Bergman, 2012; Kihlgren et al., 2005; Muntlin et al., 2010). Nurses in one Australian study described their department as *"completely constipated," "gridlocked"* and *"bottlenecked"* (Nugus et al., 2014, p. 5), which led to overcrowding, low staff satisfaction, decreased compliance with clinical guidelines, decision-making errors, an increase in the quantity of adverse events, and increased waiting times, causing patients to leave the department without being seen (Nugus et al., 2014). The imbalance between inflow and outflow meant additional tests and treatment needed to be performed in the ED, and nurses needed to continue caring for waiting patients as well as continuing to assess new patients (Elmqvist et al., 2012; Kihlgren et al., 2005). This further increased

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Table 2
Literature relating to themes and key findings.

Study and origin	Study design	Themes	Key findings
Nyström (2002) (Sweden)	Case study approach within a hermeneutic tradition	Medical-technical intervention A culture of worthiness Nurse/doctor relationships	A lack of a holistic perspective was found. Nursing is not valued but medical, concrete tasks are. Nurses did not want supervision in nursing related aspects, they wanted it in medical and technical tasks. A caring attitude was interpreted as a personal characteristic. Non-urgent pts are too demanding during busy periods. Nurses are socialised by the social authority and status of medicine. Doctors are often irritated when nurses do not direct some patients to other forms of care.
Sbaih (2002) (UK)	Observational study	A culture of worthiness Managing the patient journey through ED	ED nurses hurry colleagues and network with other settings to ensure each patient receives appropriate care but none take up more time than they need as this will mean time to see other pts is reduced. When numbers increase nurses are sensitive to minor injury work being less significant than majors.
Nyström et al. (2003) (Sweden)	Case study approach within a hermeneutic tradition	Medical-technical intervention Nurse/doctor relationships Patients' and relatives' experience of care	Care is fragmented. ED nursing was perceived as extension of medicine and the nurses appeared to not appreciate nursing. Medical goals are distinct, nursing's are not. Care is medically orientated and caring not seen as important. Patients' try to be 'good' pts. They are aware of ED demands and attempt to adapt their behaviour to fit with the ED environment.
Nydén et al. (2003) (Sweden)	A life-world interpretative approach	Patients' and relatives' experience of care	Safety needs dominated. It was vital patients could trust the competence of the staff. When waiting times were long patients felt feelings of insecurity and unsafeness. Pts tried not to bother the nurses unnecessarily. Some tried to develop a better relationship with staff by joking with them. Pts appreciated nurses being kind and friendly.
Wright et al. (2003) (USA)	Survey design	A culture of worthiness	There is a basic tension between ED work and needs of patients with serious mental health problems. ED environment is fast paced and chaotic and can exacerbate symptoms. Negative attitudes are quite prominent among ED staff.
Hislop and Melby (2003) (UK)	Phenomenology	A stressful environment	Staff saw themselves as being there in a caring capacity and could not understand why they should be the target of such verbal outbursts and physical abuse. Staff felt management did not understand what they faced daily. Some ED terminology has aggressive connotations.
Laposa et al. (2003) (Canada)	Secondary analysis of previously reported data	A stressful environment	The interpersonal environment caused stress. Stress was created mostly by organisational factors with actual patient care being less stressful.
Kihlgren et al. (2004) (Sweden)	Grounded theory	Medical-technical intervention Patients' and relatives' experience of care	There was a medical-technical culture and attention focused on the medical condition. Nursing care was characterised as meeting medical and technical demands. Patients were often more worried about their social condition than medical one. They greatly appreciated eye contact, and time taken to listen.
Winman and Wikblad (2004) (Sweden)	Non-participant observation	Medical-technical intervention	Aspects of uncaring were more common than caring. Nurses tended to engage with patient only when carrying out doctor's instructions. They concentrated on physical tasks and showed physically caring behaviours more often than affective caring behaviours.
Crilly et al. (2004) (Australia)	Descriptive longitudinal cohort design study	A stressful environment	Precipitating factors associated with violence included waiting times, alcohol, drugs and behaviour associated with mental health illness.
Kihlgren et al. (2005) (Sweden)	Observational study	Medical-technical intervention Managing the patient journey through ED	Prioritising medical care, lack of time, workload, inexperienced doctors, working with death, poor referral documentation all prevent good care. There is an imbalance between inflow of patients and outflow in the ED.
Karro et al. (2005) (Australia)	Exploratory design within a qualitative approach	Patients' and relatives' experience of care	Privacy breaches included overhearing others' conversations, seeing others' body parts or perceiving that they are overhead or seen. A minority of patients withhold information for fear of being overheard.
Coughlan and Corry (2007) (Ireland)	Qualitative approach	Managing the patient journey through ED Patients' and relatives' experience of care	The environment was compared to what would have expected to find in a low income country – overworked staff, overcrowding, trolleys and chairs lined up with patients awaiting admission, no privacy, unhygienic and lack of resources. Some patients were distressed by the treatment they received that they were in terror of returning to the ED.
Bridges (2008) (UK)	Narrative methodology (discovery interview technique)	Patients' and relatives' experience of care	Pts and their relatives described a feeling of not mattering, fear and anxiety, lack of continuity of care and discharge. They highly valued a person-centred approach from staff, with help and information tailored to their needs.
Kansagra et al. (2008) (USA)	Survey design	A stressful environment	The consequences of workplace violence for the emotional well-being of staff include anger, anxiety, fear, and decreased job satisfaction.
Clukey et al. (2009) (USA)	Qualitative approach	Patients' and relatives' experience of care	Family members appreciated staff using a sound knowledge-base and interpersonal skills. Family members were sensitive to the nonverbal behaviours – tone of voice, pace and force of actions taken, and the ability to engage in active listening, nurses taking care of the patient, being present and fully engaged with them in the moment and small actions giving physical comfort.
Khokher et al. (2009) (Canada)	Qualitative approach	Nurse/doctor relationships Patients' and relatives' experience of care	Relationships with patients varied due to ability to control volume and pressure to see as many as possible meant time brief and interaction not meaningful. Doctors are buffered from negative interactions due to their status. Nurses bore the main criticism from patients.
Smith et al. (2009) (USA)	Grounded theory	A culture of worthiness	The ethos of palliative care conflicted with the ED culture. Patients waited for lengthy periods as were not a priority. Rooms were stark with stretchers. Drunk or aggressive pts were treated nearby. Doctors had inadequate training in pain management.
Dominguez-Gomez and Rutledge (2009) (USA)	Exploratory comparative design	A stressful environment	The most commonly reported symptoms of stress for ED staff were intrusive thoughts about patients, avoidance of patients, difficulty sleeping or being easily annoyed.

(continued on next page)

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Table 2 (*continued*)

Study and origin	Study design	Themes	Key findings
Muntlin et al. (2010) (Sweden)	Qualitative approach	Medical-technical intervention A culture of worthiness Managing the patient journey through ED	Staff objectified patients and spoke of them as conditions. They claimed non-urgent patients shouldn't be there and hindered their ability to do good work. The ED culture valued 'doing' and getting the patient through the system.
Möller et al. (2010) (Sweden)	Phenomenography	Medical-technical intervention Patients' and relatives' experience of care	Patients had a fear of being forgotten in the waiting room and a feeling of not being welcome as there were too many pts there already. Staff concentrated on medical issues and forgot the patients' psychological needs.
Bailey et al. (2011) (UK)	Qualitative study drawing on ethnographic methods.	A culture of worthiness	Palliative care has low status in ED. There is a feeling that death is 'out of place' yet it is common with trauma. ED teams are meticulously trained for resuscitation but not for patients at end-of-life.
Pich et al. (2011) (Australia)	Qualitative approach	Nurse/doctor relationships A stressful environment	Nurses are most at risk of patient-related violence. Nurses were treated differently from doctors by patients. Nurses reported a sense of inevitability regarding patient-related violence and reported feeling degraded, frustrated and powerless, upset and disheartened. They recognised that the staff could contribute to patient violence and aggression.
Sanders et al. (2011) (UK)	Narrative case study	Managing the patient journey through ED Nurse/doctor relationships	ED has a culture that is subject to externally determined time targets that are enforced by a top-down system of surveillance and management. There is a power difference between doctors and nurses in ED. Nurses have responsibility for patient throughput and patients breaching targets, yet have very little power to control this.
Limbourn and Celenza (2011) (Australia)	Prospective cross-sectional study	Patients' and relatives' experience of care	Patients most valued being attended to promptly by a friendly doctor who was caring, concerned and attentive while appearing to work thoroughly, efficiently and competently, being listened to and receiving thorough explanation of their treatment, diagnosis and any advice given to them and having the opportunity to ask questions answered in simple language.
Marynowski-Traczyk and Broadbent (2011) (Australia)	Hermeneutic phenomenology	A culture of worthiness	The high-stimulus, highly technological ED environment is not conducive to mental health patients and ED nurses are poorly prepared for them. ED nurses find these "revolving door" patients frustrating.
Gilchrist et al. (2011) (Australia)	Retrospective survey	A stressful environment	Participants felt that violence had increased over the duration of their time working in the ED. Reasons given were alcohol, drug use, waiting times mental illness, and lack of understanding of the system.
Stathopoulou et al. (2011) (Greece)	Descriptive correlational design	A stressful environment	ED nurses reported having sleep disturbances, anxiety and depressed mood due to their work.
Person et al. (2012) (USA)	Ethnography	Medical-technical intervention A culture of worthiness	There is a culture unique to ED. The phrase, "the way we do things around here" demonstrates the ingrained values, beliefs, norms, and expectations of members within an organisation or work unit. ED is high volume. fast paced. and unpredictable. Staff find the work mostly rewarding.
Fry (2012) (Australia)	Ethnography	A culture of worthiness	Experienced triage nurses hold beliefs of how patients should behave that can impact on their practice. When these are breached there were negative consequences for patients who are not aware of these cultural expectations. The beliefs appear to result from notions of worthiness but are driven by notions of privacy, safety respect and equity.
Elmqvist et al. (2011) (Sweden)	Phenomenology	Patients' and relatives' experience of care	Staff are interested in the physical aspect only and patients are rapidly examined for assessment of life-threatening conditions. There is a security in this but it engenders feelings of insecurity and abandonment.
Elmqvist et al. (2012) (Sweden)	Phenomenology	Medical-technical intervention A culture of worthiness Managing the patient journey through ED Nurse/doctor relationships	ED staff adopt accepted attitudes in an attempt to bring order to an unpredictable environment. The unpredictability of ED is exciting and challenging but also creates stress. Life-saving has the highest priority and staff are always in readiness for this. Work adopts a performance focus. Nursing staff are forced to be accessible to patients while waiting for the doctor to come. They need to continue caring for waiting patients as well as see new ones to maintain control of patient flow. Nurses find it stressful when the doctor does not come as they do not know what to tell the pts about waiting times.
Andersson et al. (2012) (Sweden)	Qualitative exploratory study design	Managing the patient journey through ED	Nurses find it difficult to provide individualised care due to performing other tasks. Meeting basic patient needs becomes a task for unqualified staff.
Lau et al. (2012) (Australia)	Contemporary ethnography	A stressful environment	Busyness and long waiting times are important contributory factors to violence; however, human interaction factors have a more profound influence on it.
Bergman (2012) (USA)	Qualitative method informed by grounded theory	A culture of worthiness Managing the patient journey through ED Patients' and relatives' experience of care A stressful environment	Staff are overwhelmed due to patient volume, 'boarding' patients, the need for continuous prioritisation, lack of staff and inability to control patient flow. There is frustration at perceived abuse of ED and patients are referred to as "frequent fliers" and "regulars." A perceived lack of control is cited as a primary reason why colleagues quit or transfer out of the emergency dept.
Sawatzky and Enns (2012) (Canada)	Survey design	A stressful environment	Engagement was a key factor in nurse retention in ED and a significant predictor of intention to leave. Engagement comprised factors relating to nursing management, professional practice, collaboration with physicians, staffing resources and shift work.
Hillman (2014) (UK)	Ethnography	A culture of worthiness	Patients are categorised on the basis of medical and moral criteria and perceived moral worth. This process provides staff with a means to have control over what they determine to be inappropriate demands for the service. There are correct rules of patient behaviour and patients can be classed as 'legitimate' patients or not.

(*continued on next page*)

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Table 2 (*continued*)

Study and origin	Study design	Themes	Key findings
Nugus et al. (2014) (Australia)	Ethnography	Managing the patient journey through ED	ED has an inflexible work capacity and space leading to overcrowding which reduces efficiency and increases the risk of medical error leading to adverse events. Staff had to manage their time across several patients to minimise the impact of waiting time leading to fragmented care.
Angland et al. (2014) (Ireland)	Qualitative approach	A stressful environment	The main reasons for violence and aggression were waiting times, overcrowding, layout, lack of communication and staff attitudes towards patients, particularly at the end of a long shift or those who were deemed not appropriate to be there.

workload and responsibility and led to fragmented care (Andersson et al., 2012; Nugus et al., 2014; Sbaih, 2002). In addition, Coughlan and Corry (2007) found that the equipment, structure and design of EDs were constructed to facilitate transiting patients and were not suitable for patients who had to wait for lengthy periods of time in that environment, all of which negatively impacted on the quality of care delivered. The fact that these studies were undertaken in Sweden, USA, UK, Australia and Ireland indicate that these are widespread issues within EDs.

4.4. Nurse–doctor relationships

A further paradox reported in the literature was that while nurses had managerial responsibility of the ED they did not have managerial control over medical staff working there. Two Swedish phenomenological studies highlighted how nurses deferred to doctors. Elmqvist et al. (2012) found it was a source of stress to nurses when doctors did not come to see patients waiting in the ED. They were forced into trying to appease patients and give explanations for indeterminate waiting times over which they had no control. Nyström et al. (2003) identified how nurses interceded with patients in an attempt to keep doctors happy, indicating a deferential relationship and an awareness of their status in relation to medical staff. Nyström et al. (2003) found that some doctors became irritated when nurses failed to direct inappropriate patients to other forms of medical care. One nurse, in order to avoid outbursts, reportedly questioned herself *"do I dare let this patient in to see this doctor?"* (p. 765).

Sanders et al. (2011) presented a narrative case study on one nurse's experience of managing a busy ED in the UK, which highlighted the power status differential between nurses and doctors. While she struggled to manage the system that was governed by externally enforced service targets, one doctor responded angrily to management's insistence of moving an ill patient on in the system in order not to breach a time target. The doctor's apparent disregard for a system that seemed to dominate and direct the nurse's role highlighted the different autonomy each felt in the workplace. There were further examples of this differing status in studies from Sweden, Canada and Australia showing how patients and staff treated doctors and nurses differently. Doctors appeared to be buffered from negative interactions with patients due to their status, while nurses endured the main criticism and complaints (Khokher et al., 2009; Nyström, 2002). Pich et al. (2011) interviewed six Australian triage nurses regarding their experiences of patient-related workplace violence. They found that patients treated nurses differently from doctors and indeed often stopped their abusive behaviour when a doctor came into their presence.

4.5. Patients' and relatives' experience of care

Several studies examined patient experience in ED and found what was important to them was how they experienced staff–patient interactions (Kihlgren et al., 2004; Nydén et al., 2003; Nyström et al., 2003), communication and information received (Bridges, 2008; Limbourn and Celenza, 2011), staff competence (Clukey et al., 2009; Nydén et al., 2003), and having a family presence (Bridges, 2008). Clukey et al.'s (2009) study in USA found that relatives were sensitive to nonverbal behaviours of nurses, such as tone of voice, pace and force of actions being undertaken. They valued nurses taking care of the patient and engaging in active listening and being present and fully engaged with them in the moment.

Unfortunately the literature paints a generally negative picture in relation to how patients experienced care in EDs. One Swedish study (Nyström et al., 2003) found dissatisfaction with care, a feeling of not being considered as an individual and a lack of caring as predominant features of patients' experience. Others described patients feeling abandoned, exposed, vulnerable, ashamed, ignored, insecure, frightened, forgotten or unwelcome (Elmqvist et al., 2011; Möller et al., 2010). Factors attributed to this included the quality of staff–patient interaction, (Coughlan and Corry, 2007), fragmented care (Bergman, 2012; Khokher et al., 2009) and lack of privacy (Coughlan and Corry, 2007; Karro et al., 2005). Coughlan and Corry (2007) found that the treatment received in one Irish ED caused some patients such distress that they were in terror of returning there. Some likened it to what would be expected in a low income country or following a major disaster.

There was some evidence, however, of patients' awareness and acceptance that the ED culture placed significance on physical rather than affective caring, and there was an impression that patients were prepared to tolerate this lack of psychological care in trade-off for having the physical aspect of their care treated. Two Swedish studies made reference to patients feeling a reassurance that they were in the ED and had a sense of security in that they would be treated there (Elmqvist et al., 2012; Nydén et al., 2003). Nydén et al., 2003 found that safety needs dominated, with patients feeling fairly safe just being in hospital.

4.6. A stressful environment

Staff found working in the ED a source of stress. Studies conducted in USA, Canada, UK and Belgium supported this, indicating that the problem appeared to be an international one. Several aspects of ED work have been cited as key determinants in staffs' intention to leave their job, such as a lack of engagement and high burnout (Sawatzky and Enns, 2012), interpersonal conflict (Laposa et al., 2003) and lack of control due to the sheer volume of patients (Bergman, 2012). Staff reported suffering from a range of symptoms that included sleep disturbances, having an anxious or depressed mood (Stathopoulou et al., 2011), intrusive thoughts about patients, avoidance of patients and being easily annoyed (Dominguez-Gomez and Rutledge, 2009).

Aggression and violence were a well-documented outcome for staff in the literature and a key source of stress in the ED environment. Studies were reported from a range of countries, including UK, Ireland, Australia, USA and Turkey. Nurses appeared to be the main targets of aggression and violence, and negative consequences experienced included feelings of embarrassment, powerlessness, frustration, isolation and vulnerability (Hislop and Melby, 2003), anger, anxiety, fear, and decreased job satisfaction

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(Kansagra et al., 2008), and feeling degraded, frustrated and powerless (Pich et al., 2011). Two studies highlighted nurses' bewilderment at being targeted by patients and relatives when they were there in a caring capacity. In a UK phenomenological study by Hislop and Melby (2003), one nurse expressed a feeling as if the whole waiting room hated them and stated: *"it just wrecks my spirit"* (p. 8). Similarly Pich et al. (2011, p. 14) described nurses voicing a lack of empathy towards the so-called ungrateful patients who they were trying to help, saying it felt like *"being kicked in the teeth."*

Multiple causal factors have been suggested. Patient factors included alcohol and substance misuse (Crilly et al., 2004; Gilchrist et al., 2011; Pich et al., 2011), mental illness (Crilly et al., 2004; Gilchrist et al., 2011) and a lack of understanding of the system (Gilchrist et al., 2011). Environmental factors were also cited. such as lengthy waiting times (Gilchrist et al., 2011; Kansagra et al., 2008; Lau et al., 2012), inability to access desired services (Crilly et al., 2004; Gilchrist et al., 2011), limited space, overcrowding and lack of information (Angland et al., 2014). Several authors identified that in some cases how staff engaged with patients could also be a significant contributory factor. Angland et al. (2014) found that at times staff may exacerbate difficult situations by projecting themselves negatively. This was supported by two Australian studies which found that the behaviours staff displayed included being overtly authoritative, being judgemental and confrontational (Lau et al., 2012), and being rude and condescending to patients (Pich et al., 2011).

5. Discussion

Analysis of the literature would suggest that whilst components of person-centredness have emerged from the empirical evidence, no papers were identified that discussed person-centredness as a concept that relates to care delivery within ED. Although the vocabulary within the studies was not that of person-centredness as defined by McCormack and McCance (2010), the themes presented could be clearly mapped to the aspects within the Person-centred Practice Framework as illustrated in Fig. 2.

Prerequisites as described by McCormack and McCance (2010) focus on the attributes of staff and include being professionally competent, having developed interpersonal skills, being committed to the job, being able to demonstrate clarity of beliefs and values, and knowing self. Much of the ED literature related to prerequisites, and in particular that of having clarity of beliefs and values which in turn determined how staff viewed their work, what they valued and how they related to the various patient groups who presented in the department. Themes emerging from the literature that related to these include the focus on 'medical-technical interventions' and the presence of a 'culture of worthiness'. Staff valued medical tasks and interventions over caring and this determined what they felt the nature of ED work should be and what types of patients were considered to be worthy ED presentations. These characteristics are deeply embedded within a culture and may be difficult to recognise and acknowledge; however, evidence from the literature would suggest that ED staff need to reappraise their values since according to McCormack and McCance (2010) prerequisites form the foundation for achieving person-centred care.

The care environment as described by McCormack and McCance (2010) focuses on the context in which care is delivered, and includes appropriate skill mix, systems that facilitate shared decision making, effective staff relationships, organisational systems that are supportive, power sharing, and the potential for innovation and risk taking. The themes of 'managing the patient journey through ED' and 'nurse/doctor relationships' related to aspects of supportive organisational systems, effective staff relationships and power sharing within the framework. Within this domain the responsibilities and pressures on ED nurses were apparent in the literature as they revealed how they struggled to manage patients' journeys through a system that was governed by processes outside their control and medical staff over whom they had no authority. Inadequacies within the care environment need to be addressed if person-centred care is ever to be a reality in ED, as according to McCormack and McCance (2010) the care environment has the greatest potential to limit or enhance the delivery of person-centred care.

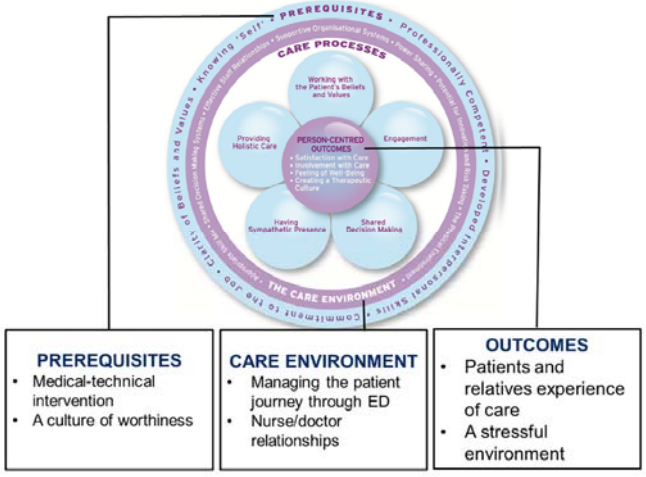

Fig. 2. Mapping literature themes to the Person-centred Framework.

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It was evident from the literature that the ED care environment impacted on how staff engaged in person-centred processes. Person-centred processes as described by McCormack and McCance (2010) focus on delivering care through a range of activities and include working with patient's beliefs and values, engagement, having sympathetic presence, sharing decision making, and providing for physical needs. Various aspects of the framework, in particular from the prerequisites and care environment domains, were seen to impact on how care was delivered. For example a concentration on tasks and interventions and the need to maintain patient throughput meant that care delivered was fragmented and staff failed to engage fully with patients. While this was not identified as a major theme within the papers reviewed, it was an apparent consequence that was threaded throughout the literature. It is clear from the literature that the demands of ED work impacted on staffs' ability to deliver person-centred processes; however, McCormack and McCance (2010) contend that a shift in attitudes and behaviours could still enable this to be achieved.

McCormack and McCance (2010) contend that staff must possess certain attributes and work in an appropriate care environment to deliver effective care processes in order to achieve effective person-centred outcomes for patients and staff. Outcomes are the results of effective person-centred practice and include satisfaction with care, involvement in care, feeling of well-being, and creating a therapeutic environment. A large proportion of the literature focused on negative outcomes for ED staff and patients. Staff experienced a stressful environment due to systems beyond their control, staff relationships, and violence and aggression, which had negative psychological consequences for them, including burnout and a desire to leave ED. Patients' experiences of care in turn were greatly impacted on by how staff interacted with them and the environment in which they were cared for, and often resulted in care that was far from what they would have wished for themselves or their relatives. Various components within the prerequisites, care environment and care processes could be seen to contribute to these outcomes, although this was surmised from the literature as this was not usually the objective of the studies undertaken, indicating that there is value in exploring person-centredness as a concept within an ED context.

6. Conclusion

Person-centred care is comprised of several distinct components that interact with each other and ultimately determine the care experience for staff and patients. The findings from this analysis of the international literature confirm that there are powerful relationships between these various components that are considered crucial to the development of person-centred practice that have not been explored within ED to date. Associations and links originating from the studies have been limited to those found between or within one or two of these components described by McCormack and McCance (2010). Consideration as to how all of the individual components that comprise person-centredness interact with, and impact on, each other in the delivery of care within the ED setting has not been explored within the current literature. This information, however, is vital if the delivery of person-centred care within the ED context is to be realised, and is therefore the focus of the author's current doctoral studies.

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Conflict of interest

None declared.

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Appendix 2

PARTICIPANT INFORMATION SHEET

Study title: **Person-Centredness in the Emergency Department**

You are being invited to take part in a research study that is being undertaken as part of a PhD. Before you decide you need to understand why the research is being done and what it would involve for you. Please take the time to read this information carefully and speak to others about the study if this would help.

What is the purpose of the study?

The overall study examines person-centredness in the Emergency Department and as part of the study we want to explore staffs' experience of working and delivering care in Emergency Departments.

Why have I been chosen?

You have been invited to take part because you are a member of staff in an Emergency Department.

Do I have to take part?

Taking part in this study is entirely your decision. If you choose not to take part you do not have to take any action and no one (e.g. your manager) will know. The study includes a questionnaire and a face-to-face interview stage. You may take part in one or both stages if you wish.

What will happen to me if I take part?

Along with this information sheet there is a questionnaire. If you are interested in participating could you please complete the questionnaire and return it in the enclosed freepost envelope. There are no 'right' or 'wrong' answers to these questions: please tick the box that most closely matches your opinion. A reminder for completion will be sent to each department at week 2 and week 4, with the deadline for completion at the end of week 6. As a follow on to this, there will also be an opportunity to volunteer

to participate in the second stage of the study which is a confidential face-to-face interview.

Will my information be kept confidential?

The questionnaire is anonymous. If you agree to take part in this study, your name will not be disclosed and no personal information will be traced back to you. All information will be handled, and stored in accordance with the requirements of the Data Protection Act 1998.

What if there is a problem?

If you have concerns about any aspect of the study you can speak with my PhD supervisors Tanya McCance or Vidar Melby who will try to answer your questions. If you remain unhappy and wish to complain formally, you can contact Mr Nick Curry from the Research Office at Jordanstown University on 028 903 66629.

What will happen to the results of the research study?

The results of this study will highlight the experience of care in Emergency Departments in Northern Ireland. This is your opportunity to voice your own experiences and may help to improve practice and promote person-centred care. An analysis of the findings will be submitted for publication in a professional journal and will be presented at conferences. A written summary of the findings from the study will be sent to all nurses and doctors working in Emergency Departments. If you wish you will have the opportunity to discuss these with the Research Team. Contact details are provided below.

Who is organising and funding the research?

This study is being undertaken as part of a programme of study at the University of Ulster and is being part funded by a Martha McMenamin Memorial Scholarship.

Who has reviewed the study?

The study has been reviewed by the each of the Health and Social Care Trusts and by the University of Ulster School of Nursing Research Ethics Committee and one of the Research Ethics Committees in Northern Ireland, an independent group of people who aim to protect your safety, rights, wellbeing and dignity.

Further information and contact details

If you have any queries or would like further information on the study please feel free to contact a member of the Research Team. Contact details are provided on the following page.

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Thank you for taking time to read this information.

University of ULSTER

Appendix 3

Exploring Person-Centredness in the Emergency Department

Thank you for agreeing to take part in this survey. Your participation is greatly appreciated.

There are no "right" or "wrong" answers to these questions: please tick the box that most closely matches your opinion.

Section 1:

This section is about you. We are not asking any questions that will be able to identify you individually. Please tick one answer only to each of the following questions

1. Please indicate if you work in a large Emergency Department (departments that have over 50, 000 new attendances per year).

   Altnagelvin, Antrim Area, Craigavon Area, Royal Victoria, Ulster, ☐
   Causeway, Daisy Hill, Lagan Valley, Mater, Southwest Acute Hospital ☐
   Do not wish to disclose ☐

2. Are you a...?
   Doctor ☐ Nurse ☐

3. How many years clinical experience have you had in total?

   <1 year ☐ 1-5 years ☐ 6-10 years ☐ Over 10 years ☐

4. How many years experience have you had working in an Emergency Department?

   <1 year ☐ 1-5 years ☐ 6-10 years ☐ Over 10 years ☐

Section 2:

This section of the questionnaire asks questions about your experience in ED

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5.	I have the necessary skills to negotiate care options.	☐	☐	☐	☐	☐
6.	When I provide care I pay attention to more than the immediate physical task.	☐	☐	☐	☐	☐
7.	I actively seek opportunities to extend my professional competence.	☐	☐	☐	☐	☐
8.	I ensure I hear and acknowledge others perspectives.	☐	☐	☐	☐	☐
9.	In my communication I demonstrate respect for others.	☐	☐	☐	☐	☐
10.	I use different communication techniques to find mutually agreed solutions.	☐	☐	☐	☐	☐
11.	I pay attention to how my non-verbal cues impact on my engagement with others.	☐	☐	☐	☐	☐
12.	I strive to deliver high quality care to people.	☐	☐	☐	☐	☐
13.	I seek opportunities to get to know the person and their family in order to provide holistic care.	☐	☐	☐	☐	☐
14.	I go out of my way to spend time with people receiving care.	☐	☐	☐	☐	☐
15.	I strive to deliver high quality care that is informed by evidence.	☐	☐	☐	☐	☐
16.	I continuously look for opportunities to improve the care experiences.	☐	☐	☐	☐	☐
17.	I take time to explore why I react as I do in certain situations.	☐	☐	☐	☐	☐

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
18.	I use reflection to check out if my actions are consistent with my ways of being.	☐	☐	☐	☐	☐
19.	I pay attention to how my life experiences influence my practice.	☐	☐	☐	☐	☐
20.	I actively seek feedback from others about my practice.	☐	☐	☐	☐	☐
21.	I challenge colleagues when their practice is inconsistent with our team's shared values and beliefs.	☐	☐	☐	☐	☐
22.	I support colleagues to develop their practice to reflect the team's shared values and beliefs.	☐	☐	☐	☐	☐
23.	I recognise when there is a deficit in knowledge and skills in the team and its impact on care delivery.	☐	☐	☐	☐	☐
24.	I am able to make the case when skill mix falls below acceptable levels.	☐	☐	☐	☐	☐
25.	I value the input from all team members and their contributions to care.	☐	☐	☐	☐	☐
26.	I actively participate in team meetings to inform my decision-making.	☐	☐	☐	☐	☐
27.	I participate in organisation-wide decision-making forums that impact on practice.	☐	☐	☐	☐	☐
28.	I am able to access opportunities to actively participate in influencing decisions in my directorate/division.	☐	☐	☐	☐	☐
29.	My opinion is sought in clinical decision-making forums (e.g. ward rounds, case conferences, discharge planning).	☐	☐	☐	☐	☐

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
30.	I work in a team that values my contribution to person-centred care.	☐	☐	☐	☐	☐
31.	I work in a team that encourages everyone's contribution to person-centred care.	☐	☐	☐	☐	☐
32.	My colleagues positively role model the development of effective relationships.	☐	☐	☐	☐	☐
33.	The contribution of colleagues is recognised and acknowledged.	☐	☐	☐	☐	☐
34.	I actively contribute to the development of shared goals.	☐	☐	☐	☐	☐
35.	The leader facilitates participation.	☐	☐	☐	☐	☐
36.	I am encouraged and supported to lead developments in practice.	☐	☐	☐	☐	☐
37.	I am supported to do things differently to improve my practice.	☐	☐	☐	☐	☐
38.	I am able to balance the use of evidence with taking risks.	☐	☐	☐	☐	☐
39.	I am committed to enhancing care by challenging practice.	☐	☐	☐	☐	☐
40.	I pay attention to the impact of the physical environment on people's dignity.	☐	☐	☐	☐	☐
41.	I challenge others to consider how different elements of the physical environment impact on person-centredness (e.g. noise, light, heat etc).	☐	☐	☐	☐	☐
42.	I seek out creative ways of improving the physical environment.	☐	☐	☐	☐	☐

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
43.	In my team we take time to celebrate our achievements.	☐	☐	☐	☐	☐
44.	My organisation recognises and rewards success.	☐	☐	☐	☐	☐
45.	I am recognised for the contribution that I make to people having a good experience of care.	☐	☐	☐	☐	☐
46.	I am supported to express concerns about an aspect of care.	☐	☐	☐	☐	☐
47.	I have the opportunity to discuss my practice and professional development on a regular basis.	☐	☐	☐	☐	☐
48.	I integrate my knowledge of the person into care delivery.	☐	☐	☐	☐	☐
49.	I work with the person within the context of their family and carers.	☐	☐	☐	☐	☐
50.	I seek feedback on how people make sense of their care experience.	☐	☐	☐	☐	☐
51.	I encourage people to discuss what is important to them.	☐	☐	☐	☐	☐
52.	I include the family in care decisions where appropriate and/or in line with the person's wishes.	☐	☐	☐	☐	☐
53.	I work with the person to set health goals for their future.	☐	☐	☐	☐	☐
54.	I enable people receiving care to seek information about their care from other healthcare professionals.	☐	☐	☐	☐	☐
55.	I try to understand the person's perspective.	☐	☐	☐	☐	☐
56.	I seek to resolve issues when my goals for the person differ from their perspectives.	☐	☐	☐	☐	☐

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
57.	I engage people in care processes where appropriate.	☐	☐	☐	☐	☐
58.	I actively listen to people receiving care to identify unmet needs.	☐	☐	☐	☐	☐
59.	I gather additional information to help me support people receiving care.	☐	☐	☐	☐	☐
60.	I ensure my full attention is focused on the person when I am with them.	☐	☐	☐	☐	☐
61.	I strive to gain a sense of the whole person.	☐	☐	☐	☐	☐
62.	I assess the needs of the person, taking account of all aspects of their lives.	☐	☐	☐	☐	☐
63.	I deliver care that takes account of the whole person.	☐	☐	☐	☐	☐

Thank you for taking the time to complete the questionnaire.

Once you have responded to all of the above questions please return this in the envelope provided to:

Donna McConnell, School of Nursing, Jordanstown campus, University of Ulster, Shore Road, Newtownabbey, BT37 0QB

Appendix 4

Dear prospective participant

My name is Donna McConnell and I am a part-time PhD student at the University of Ulster. I am writing to request your participation in the first stage of a study in which I am exploring person-centredness in Emergency Departments in Northern Ireland. The Participant Information Sheet enclosed with this pack contains the details of the study and hopefully will answer any questions you may have. I would however wish to emphasise that completion of the questionnaire is entirely voluntary and no-one will know who participates or not. There are no 'right' or 'wrong' answers to the questions.

The study can also be accessed on-line at the following link.
https://ulsterhealth.eu.qualtrics.com/SE/?SID=SV_dneqTPaJdSdMvL7

Anonymity is assured, as the questionnaires are not coded in any way that could allow respondents to be identified. It is anticipated that it should take approximately 5 - 10 minutes of your time to complete and your participation would be greatly appreciated.

Yours sincerely,

Donna McConnell.

Donna McConnell.
Tel: 02890368581
E-mail: d.mcconnell@ulster.ac.uk

Appendix 5

Dear Manager (name)

Could I please ask you to display the enclosed reminder letters in prominent places in the staff areas of the emergency department regarding the questionnaires on Person-Centredness in Emergency Departments? I would be very grateful for your help in this. Please do not hesitate to contact me if you need additional copies of the questionnaire or Participant Information Sheet or if you have any queries regarding anything to do with the study.

Thank you,

Yours sincerely,

Donna McConnell.

Donna McConnell

Tel: 02890368581

E-mail: d.mcconnell@ulster.ac.uk

Appendix 5

Dear all

This is a friendly reminder to ask you if you would please take 5 – 10 minutes to complete the questionnaire on Person –Centeredness in Emergency Departments.

This is your opportunity to voice your own experiences of working in the Emergency Department and generate information that could inform the development of person-centred practice.

Please refer to Participant Information Sheet for more detail.

If you need another copy of the questionnaire or a Participant Information Sheet please contact Donna McConnell on 028 90368581 or email at d.mcconnell@ulster.ac.uk

Thanking you in anticipation of your assistance

Donna McConnell

Tel: 02890368581

E-mail: d.mcconnell@ulster.ac.uk

*

Appendix 6

Dear staff member

My name is Donna McConnell and I am a part-time PhD student at Ulster University. For my study I am exploring person-centredness in Emergency Departments in Northern Ireland. I recently undertook a survey with nursing and medical staff for stage one of the study, which examined their experience of care in Emergency Departments. I have attached the main findings from this for your information. I am inviting you to take part in the second part of the study where key issues identified from stage 1 are explored in more detail. This involves taking part in a face-to-face interview with me. This is entirely voluntary and details of those who take part will not be divulged to anyone. The Participant Information Sheet enclosed contains the details of the study and hopefully will answer any questions you may have. It is anticipated that the interview should last approximately one hour and your participation would be greatly appreciated. If you would be interested in participating in this please contact me at the following number 07517 964662.

The interviews will be confidential and care will be taken to ensure anonymity when writing up and disseminating findings.

Thank you in anticipation.

Yours sincerely,

Donna McConnell.

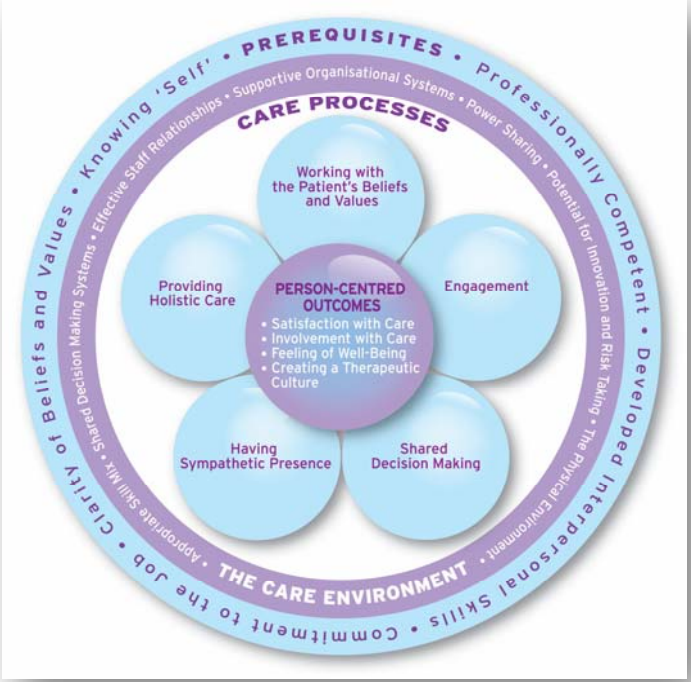
Donna McConnell.
Tel: 02890368581
E-mail: d.mcconnell@ulster.ac.uk

* Ulster University changed logo during the course of this study in 2014.

Appendix 7

Exploring Person-Centredness in Emergency Departments

Summary of stage 1 findings based on responses from 252 nurses and 50 doctors:



McCormack and McCance (2010)

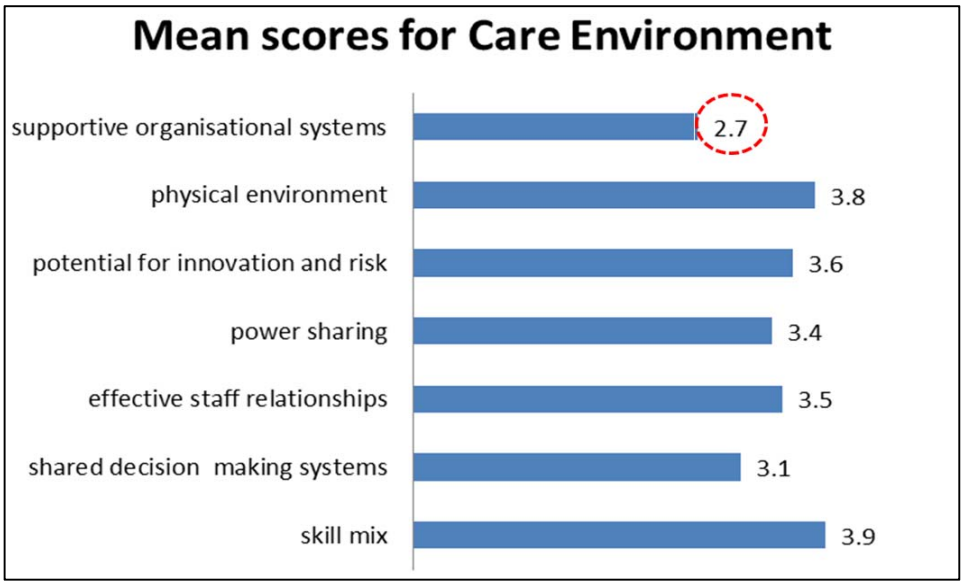
Staff in smaller EDs (less than 50 000 patients per annum) responded more positively in all aspects of the survey than those in larger EDs

Prerequisites – the skills and competencies of staff

- ED staff felt that they possessed the necessary skills and competencies to deliver person-centred care
- Nurses felt more strongly than doctors that they had the necesssary skills and competencies to deliver person-centred care

The care environment – the Emergency Department

- Staff responded neutrally about the ED care environment indicating that they neither agreed nor disagreed that it supported the delivery of person-centered care
- Doctors felt more strongly than nurses that they worked in an environment that supported the delivery of person-centred care
- Staff felt the organisation did not celebrate or reward their successes
- The ED environment does not impact on how care is delivered there



Mean scores: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

Items comprising Supportive Organisational systems	Score	Staff response
My team take time to celebrate achievements	2.4	Disagree
My organisation recognises and rewards success.	2.4	Disagree
I am recognised for the contribution that I make to people having a good experience of care.	3.0	Neutral
I am supported to express concerns about an aspect of care.	3.2	Neutral
I have the opportunity to discuss my practice and professional development on a regular basis.	2.7	Neutral

Person-centred care processes

- Staff agreed that they engaged in person-centred care processes
- Nurses felt more strongly than doctors that they engaged in person-centred care processes

Appendix 8

PARTICIPANT INFORMATION SHEET

Study title: Person-Centredness in the Emergency Department

You are being invited to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take the time to read this information carefully and speak to others about the study if this would help.

What is the purpose of the study?

The overall study examines person-centredness in the Emergency Department and part of the study aims to explore staffs' experience of working and delivering care in Emergency Departments.

Why have I been chosen?

You have been invited to take part because you are a member of staff in an Emergency Department.

Do I have to take part?

Taking part in this study is entirely your decision. If you choose not to take part this will be respected. Details of those who take part will not be divulged to anyone. If you do decide to take part you will be asked to sign a consent form before being involved in a face-to-face interview.

What will happen to me if I take part?

Taking part will involve speaking to the researcher about your experiences working in the Emergency Department in a face-to-face interview. You should contact the researcher within two weeks of receiving this information sheet and the interview should take place within the following three weeks. The interview can be arranged for a time and place that suits you and should take approximately one hour of your time. Your permission will be sought to voice-record the interview so the information can be typed at a later time. With your permission you may be contacted following the interview to clarify what was said. If you wish to proceed after reading this information please contact the researcher to arrange the interview.

Will my information be kept confidential?

If you agree to take part in this study, your name will not be disclosed and no personal information will be traced back to you. All information will be handled, and stored in accordance with the requirements of the Data Protection Act 1998. However, if poor or dangerous practice is identified during the course of the interview, this must be acted upon and will be raised with the senior manager from the area in order for the appropriate action to be taken. You will be informed of any disclosure.

What will happen if I agree and then change my mind?

You can change your mind at anytime and withdraw from the study, even during the interview and your decision will be respected. Information that you have provided may still be used however this can be excluded from the study if you wish.

What if there is a problem?

If you have concerns about any aspect of the study you can speak with the researcher's PhD supervisors Tanya McCance or Vidar Melby who will try to answer your questions. If you remain unhappy and wish to complain formally, you can contact Mr Nick Curry from the Research Office at Ulster University, Jordanstown on 028 903 66629.

What will happen to the results of the research study?

The results of this study will highlight the experience of carrying out care in Emergency Departments in Northern Ireland. This is your opportunity to voice your own experiences and may help to improve practice and deliver more person-centred care. An analysis of the findings will be submitted for publication in a professional journal and/or may be presented at conferences. You will not be identifiable from any quotations. If you wish, you may have a written summary of the findings from the study and have the opportunity to discuss these with the Research Team. This will be discussed with you at interview.

Who is organising and funding the research?

This study is being undertaken as part of a programme of study at Ulster University and is being part funded by a Martha McMenamin Memorial Scholarship.

Who has reviewed the study?

The study has been reviewed by the each of the Health and Social Care Trusts and by the Ulster University School of Nursing Research Ethics Committee and one of the Research Ethics Committees in Northern Ireland, an independent group of people who aim to protect your safety, rights, wellbeing and dignity.

Further information and contact details

If you have any queries or would like further information on the study please feel free to contact a member of the Research Team. Contact details are provided below.

Donna McConnell
Lecturer
School of Nursing, Jordanstown campus
Ulster University
Shore Road
Newtownabbey
BT37 0QB
Email: d.mcconnell@ulster.ac.uk
Tel: 028 903 68581

Professor Tanya McCance
Professor of Nursing
Institute of Nursing and Health Research
School of Nursing, Jordanstown campus
Ulster University
Shore Road
Newtownabbey
Co. Antrim BT37 0QB
Email: tv.mccance@ulster.ac.uk
Tel: 028 903 66450

Dr Vidar Melby
Senior Lecturer
School of Nursing, Magee Campus
Ulster University
Northland Rd, BT48 7JL
Email: v.melby@ulster.ac.uk
Tel: 028 71675227

Thank you for taking time to read this information.

Consent Form **Appendix 9**

Person-Centredness in the Emergency Department

Title of Project

Tanya McCance

Name of Chief Investigator

Please initial

• I confirm that I have been given and have read and understood the information sheet for the above study and have asked and received answers to any questions raised	[ ]
• I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason and without my rights being affected in any way	[ ]
• I understand that the researchers will hold all information and data collected securely and in confidence and that all efforts will be made to ensure that I cannot be identified as a participant in the study (except as might be required by law) and I give permission for the researchers to hold relevant personal data	[ ]
• I agree to take part in the above study	[ ]
• I agree to voice recording of the interview	[ ]

Name of Subject	***Signature***	***Date***
Name of person taking consent	***Signature***	***Date***
Name of researcher	***Signature***	***Date***

One copy for the subject; one copy for the researcher

Appendix 10

Dear

My name is Donna McConnell and I am a part-time PhD student at Ulster University. I am writing to request your assistance with the second stage of a study in which I am exploring person-centredness in Emergency Departments (EDs) in Northern Ireland. The study has received ethical approval and permission has been granted from the Executive Director of Nursing to conduct the research study in your ED. This stage involves interviewing service users who attend the ED. I am requesting your help with the distribution of information leaflets inviting patients, and/or those who accompany them, to participate in a face-to-face interview. I would like to ask the nurse in charge to give out leaflets to service users who attend the ED and meet the following criteria

- Over 18 years of age
- Deemed by nursing and/or medical staff as fit to be approached at that time, taking into account any illness, disability or distress

I have enclosed letters to be distributed to those staff who would take charge of the department requesting their assistance and detailing what is involved. In addition I have also enclosed the information leaflets to be distributed to those who fulfil the criteria.

Posters and leaflets will also be displayed in the waiting room to allow service users to approach the researcher on their own initiative. It is anticipated that an adequate number of volunteers will have been recruited within a four week period; however if sufficient numbers are obtained before this I will contact you again to inform you to discontinue distributing the leaflets.

Yours sincerely,

Donna McConnell.

Donna McConnell.

Tel: 028 903 68581

E-mail: d.mcconnell@ulster.ac.uk

Appendix 11

Ulster University

Are you interested in taking part in a research study?

Donna McConnell, a PhD student at Ulster University, is looking for individuals to take part in her study which is exploring the experiences of patients and/or those accompanying patients who have attended an emergency department. (Please note this is not the Trust service user feedback process).

This study has gained ethical approval from….

Who's eligible? Anyone…

- Over 18 years of age
- Who has been a patient or has accompanied a patient in an emergency department

What would be involved?

One face-to-face interview with Donna at a time convenient for you. This will take approximately 1 hour.

Contact

For more information or if you are interested in taking part please ask a member of staff who will give you further information or contact Donna McConnell at the number below

Email: d.mcconnell@ulster.ac.uk

Tel: 07517 964662

Ulster University

Appendix 12

PARTICIPANT INFORMATION SHEET

Study title: Person-Centredness in the Emergency Department

My name is Donna McConnell and I am a part-time PhD student at the Ulster University. I am writing to invite you to participate in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take the time to read this information carefully and speak to others about the study if this would help.

What is the purpose of the study?

The overall study aims to examine how care is delivered and experienced in Emergency Departments. As part of this study we want to explore service user's experiences of the care they have received in the Emergency Department. (Please note this differs from the Trust service user feedback process. If you have a complaint, enquiry, comment or suggestion about care provided this should be dealt with through the usual Trust process).

Why have I been chosen?

You have being invited to take part because you have been a patient or have accompanied a patient in an Emergency Department and therefore have recently experienced care there.

Do I have to take part?

Taking part in this study is entirely your decision. If you choose not to take part this will be respected. You do not have to take any action and the care you receive will not be affected in any way. Names of those who take part will not be divulged to anyone. If you do decide to take part you will be asked to sign a consent form before being involved in an interview.

What will happen to me if I take part?

Taking part will involve speaking me (the researcher) about your experiences in the Emergency Department in a face-to-face interview. You should aim to contact me within two weeks of discharge from hospital, and I will try to speak to you within one week of this. This should ensure your experience is still 'fresh' in your mind. The interview can be arranged for a time that suits you and be held in a place of your choice. It should take approximately one hour of your time. Your permission will be sought to voice-record the interview so the information can be typed at a later time. With your permission you may be contacted following the interview to clarify what was

said. If you wish to proceed after reading this information please contact me on 07517 964662 to arrange the interview.

Will my information be kept confidential?

If you agree to take part in this study, your name will not be disclosed and no personal information will be traced back to you. All information will be handled, and stored in accordance with the requirements of the Data Protection Act 1998. However, in the interest of patient safety, if information is provided in the interview that would suggest that there was has been a risk to yourself or others as a result of care provided, this must be acted upon, and will be raised with the senior manager from the area in order for the appropriate action to be taken. You will be informed of any disclosure.

What will happen if I agree and then change my mind?

You can change your mind at anytime and withdraw from the study, even during the interview, and your decision will be respected. Information that you have provided may still be used however this can be excluded from the study if you wish.

What if there is a problem?

If you have concerns about any aspect of the study you can speak with my PhD supervisors Tanya McCance or Vidar Melby who will try to answer your questions. If you remain unhappy and wish to complain formally, you can contact Mr Nick Curry from the Research Office at Ulster University, Jordanstown on 028 903 66629.

What will happen to the results of the research study?

The results of this study will highlight service user's experiences in Emergency Departments in Northern Ireland and may help to improve practice and promote person-centred care. An analysis of the findings will be submitted for publication in a professional journal and/or may be presented at conferences. You will not be identifiable from any quotations. If you wish, you may have a written summary of the findings from the study and have the opportunity to discuss these with the Research Team. This will be discussed with you at interview.

Who is organising and funding the research?

This study is being undertaken as part of a programme of study at Ulster University and is being part funded by a Martha McMenamin Memorial Scholarship.

Who has reviewed the study?

The study has been reviewed by the each of the Health and Social Care Trusts and by the Ulster University School of Nursing Research Ethics Committee and one of the Research Ethics Committees in Northern Ireland, an independent group of people who aim to protect your safety, rights, wellbeing and dignity.

Further information and contact details

If you have any queries or would like further information on the study please feel free to contact a member of the Research Team. Contact details are provided over the page.

Donna McConnell

Lecturer

School of Nursing, Jordanstown campus

Ulster University

Shore Road

Newtownabbey

BT37 0QB

Email: d.mcconnell@ulster.ac.uk

Tel: 028 903 68581

Professor Tanya McCance

Professor of Nursing

Institute of Nursing and Health Research

School of Nursing, Jordanstown campus

Ulster University

Shore Road

Newtownabbey

Co. Antrim BT37 0QB

Email: tv.mccance@ulster.ac.uk

Tel: 028 903 66450

Dr Vidar Melby

Senior Lecturer

School of Nursing, Magee Campus

Ulster University

Northland Rd, BT48 7JL

Email: v.melby@ulster.ac.uk

Tel: 028 71675227

Thank you for taking time to read this information.

Appendix 13

Dear senior nurse

You are receiving this letter because you have been identified as a nurse who takes charge of the Emergency Department (ED). My name is Donna McConnell and I am a part-time PhD student at Ulster University. I am writing to request your assistance with the second stage of a study in which I am exploring person-centredness in Emergency Departments (EDs) in Northern Ireland. This stage involves interviewing service users who attend the ED. I am requesting your help with the distribution of information leaflets inviting patients, and those who accompany them, to participate in a face-to-face interview. These leaflets should be given out to service users who attend and meet the following criteria.

- Over 18 years of age
- Deemed by nursing and/or medical staff as fit to be approached at that time, taking into account any illness, disability or distress

Assessment of this will involve you using your experience and clinical judgement and your help in this matter would be greatly appreciated. Posters and leaflets will also be displayed in the waiting room to allow service users to approach the researcher on their own initiative. It is anticipated that an adequate number of volunteers will have been recruited within a four week period; however if sufficient numbers are obtained before this I will contact you again to inform you to discontinue distributing the leaflets.

Yours sincerely,

Donna McConnell.

Donna McConnell.
Tel: 028 903 68581
E-mail: d.mcconnell@ulster.ac.uk

Appendix 14

Procedures to ensure safety of the researcher

In recognising the risk associated with interviewing participants in their own home, consideration needed to be given to ensuring the safety of the researcher.

The following procedures will be put in place by the Research Team:

- The time of a scheduled interview will be communicated to a member of staff in the University School of Nursing Department and a sealed envelope with participant's name, address and contact details will be provided.
- The researcher will ring the identified person in the Department immediately after completion of the interview.
- If this call is not received by an agreed time, the assigned member of staff will ring the researcher on her mobile (which will be on vibrate mode).
- If there is no answer, the member of staff will open the sealed envelope and raise the alarm.
- The sealed envelope will be shredded following completion of the interview.

Taken from University of Ulster Fieldwork Policy available at:
http://www.ulster.ac.uk/hr/healthandsafety/Procedures/fieldwork.pdf

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
Planning	Planning quality	Foundational element	Comprehensive and critical review of the literature is needed to situate the study and shape both the research question and methods.	Chapter 2 Literature review, publication in peer reviewed journal (see appendix 1).
		Rationale transparency	Justification for using a mixed methods approach is provided.	Rationale given in section 4.2.
		Planning transparency	Details should be given about the paradigm, planned design, data collection, analysis and reporting	Paradigm discussed in chapter 3, design, data collection, analysis in chapter 4, reported in PhD

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
			according to Creswell's guide for a good proposal.	thesis available in the Ulster University library, literature review published in peer reviewed journal.
		Feasibility	The design, and each component, can be undertaken in the resources (time, money, manpower) available.	The study received approval from the Office for Research Ethics Committee, and trust governance in each of the 5 trusts in Northern Ireland. The study was supervised by experienced researchers and progress was

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
				regularly assessed as per university procedures.
Undertaking	Design quality	Design transparency	Description of design type from known typology, or key aspects of design, if known typologies do not describe design used.	Two-stage sequential explanatory design described. See research design section 4.4.
		Design suitability	The design is appropriate for addressing the overall research question, matches the reason for combining methods, and is appropriate for the stated paradigm.	Rationale for choice of research design given in section 4.3 and is appropriate for the pragmatic paradigm – see chapter 3.

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
		Design strength	The strengths and weaknesses of methods are considered to minimise shared bias and optimise the breadth and depth of the study.	Survey and semi-structured interviews were undertaken for reasons of complementarity and development, thereby examining different aspects of the same phenomenon and expanding the breadth and depth of the study.
		Design rigour	Methods are implemented in a way that remains true to the design.	Methods followed the two stage sequential explanatory design with the survey followed by the semi-structured interviews.

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
Undertaking	Data quality	Data transparency	Each of the methods is described in sufficient detail, including its role within the study.	See section 4.6 for description of stage 1 and sections 4.7 for stage 2 and section 4.3 for its role within the study.
		Data rigour/design fidelity	The extent to which methods are implemented with rigour	Process documented in chapter 4 and evidenced throughout thesis in subsequent chapters.
		Sampling adequacy	Sampling technique and sample size for each method are adequate in the context of the design	Stage 1 achieved numbers needed for power calculation (section 4.6.1). Stage 2 achieved adequate sampling numbers (section 4.7.3).

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
		Analyst adequacy	Data analysis techniques are appropriate for the research question and are undertaken properly.	Techniques described in chapter 4 and documented in chapters 5, 6, 7 and 8.
		Analytic integration rigour	Any integration taking place at the analysis stage of a study is robust, e.g. data transformations are defensible.	Integration is seen where the stage 1 findings inform the interview schedule and integration of findings takes place at discussion stage in chapter 9
Interpreting	Interpretive rigour	Interpretive transparency	It is clear which findings have emerged from which methods.	Chapter 9 makes explicit which stage each finding came from.

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
		Interpretive consistency	Inferences are consistent with the findings on which they are based.	There is clear reference to where inferences are formed from in chapter 9.
		Interpretive theoretical consistency	Inferences are consistent with current knowledge or theory.	Inferences are clearly referenced to the underpinning theoretical PCPF in chapter 9.
		Interpretive agreement	Others are likely to reach the same conclusions based on the findings presented, including other researchers and participants.	The results chapters and their integration have been peer reviewed. Findings have been peer reviewed and assessed at seminar presentations

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
		Interpretive distinctiveness	Conclusions drawn are more credible than any other conclusions.	Conclusions have been reviewed and discussed extensively with supervisory team to ensure credibility.
		Interpretive efficacy	Meta-inferences from the whole study adequately incorporate inferences from the qualitative and quantitative findings and inferences.	Meta-inferences achieved through integration of both dataset results are reported in chapter 9.
		Interpretive bias reduction		Inconsistencies were discussed extensively with supervisory

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
		Interpretive correspondence	Explanations are given for inconsistencies between findings and inferences. Inferences correspond to the purpose of the study, the overall research question, and the research questions within this.	team. How inconsistencies prompted further insights are documented in chapter 9. How inferences address the research questions are addressed in concluding chapter 10.
Interpreting	Inference transferability	Ecological transferability	Transferability to other contexts and settings.	Sufficient detail has been given to allow the reader to assess how the study transfers to other

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
	(where conclusions can be applied to)	Population transferability	Transferability to other groups and individuals.	settings, groups, time and methods.
		Temporal transferability	Transferability to the future.	
		Theoretical transferability	Transferability to other methods of measuring behaviour.	
		Reporting availability	Study is successfully completed within allocated resources of time, money and staff.	Completed and submitted on time.
		Reporting transparency	Key aspects of study reported, according to GRAMMS.	GRAMMS checklist

Stage of study	Domains of quality	Items within Domain	Definition of item	Location in the study
		Yield	Whole more than sum of parts.	Chapter 9 discussed integrated findings and chapter 10 shows how these are more than the sum of both parts

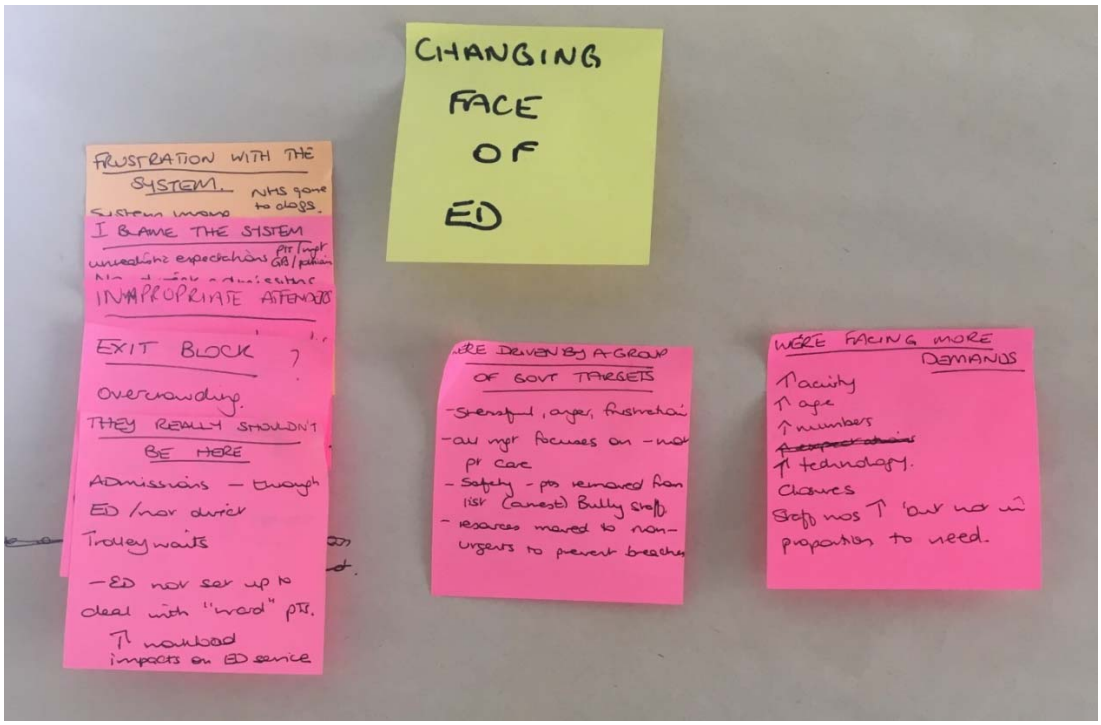
The Theming Process

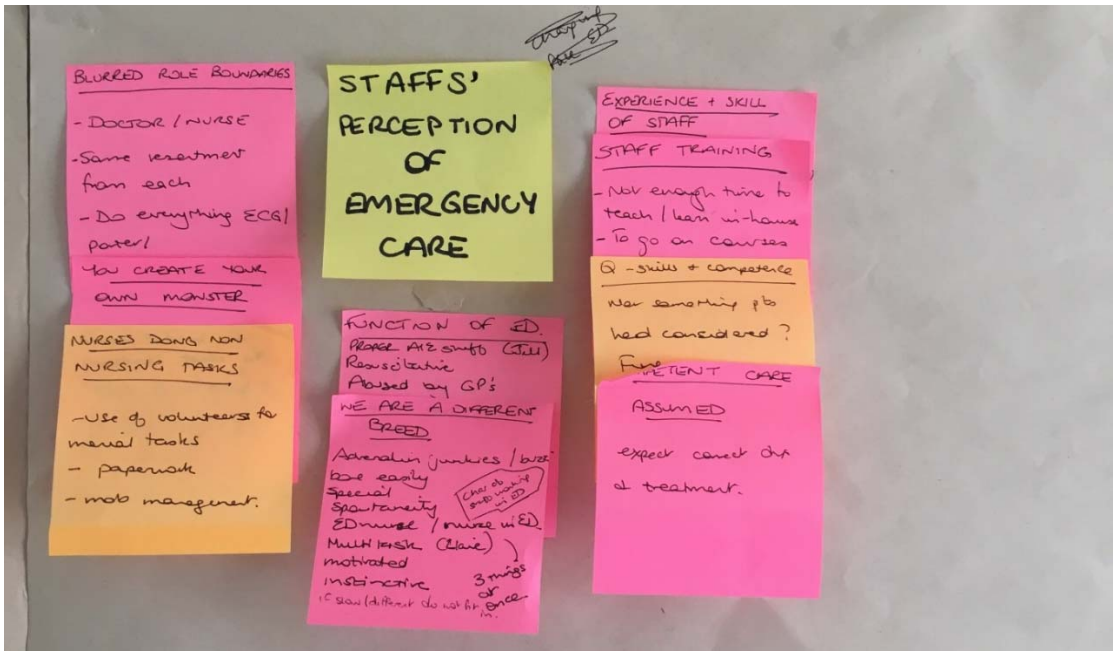
Appendix 16

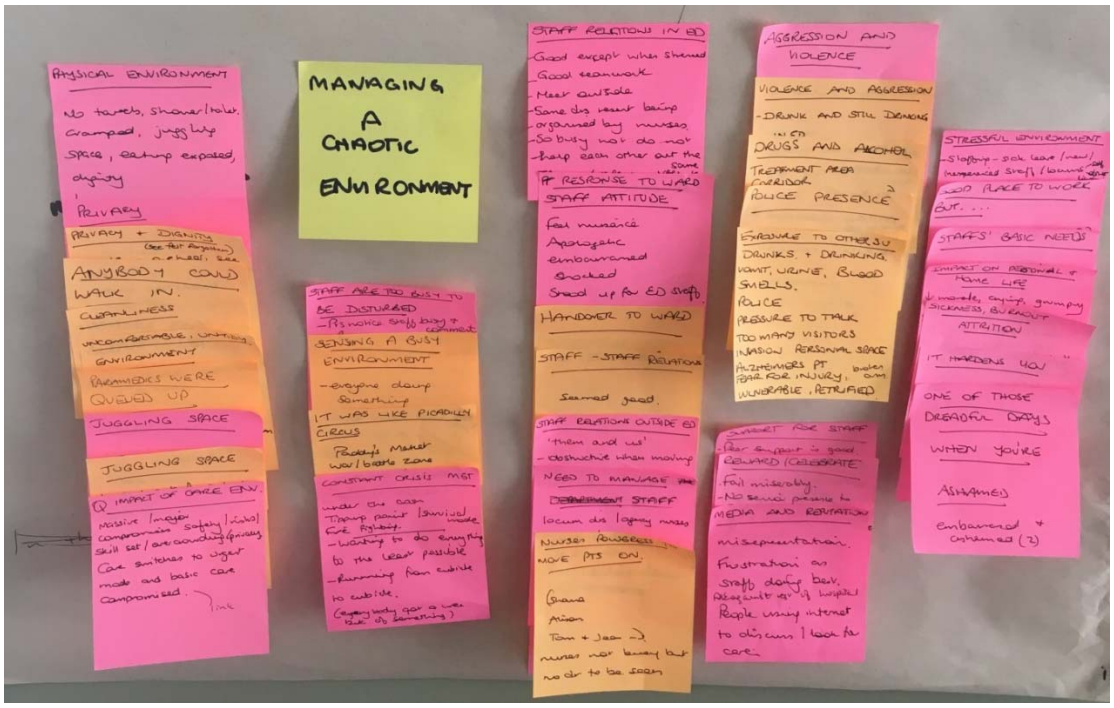
Initial uncategorised themes

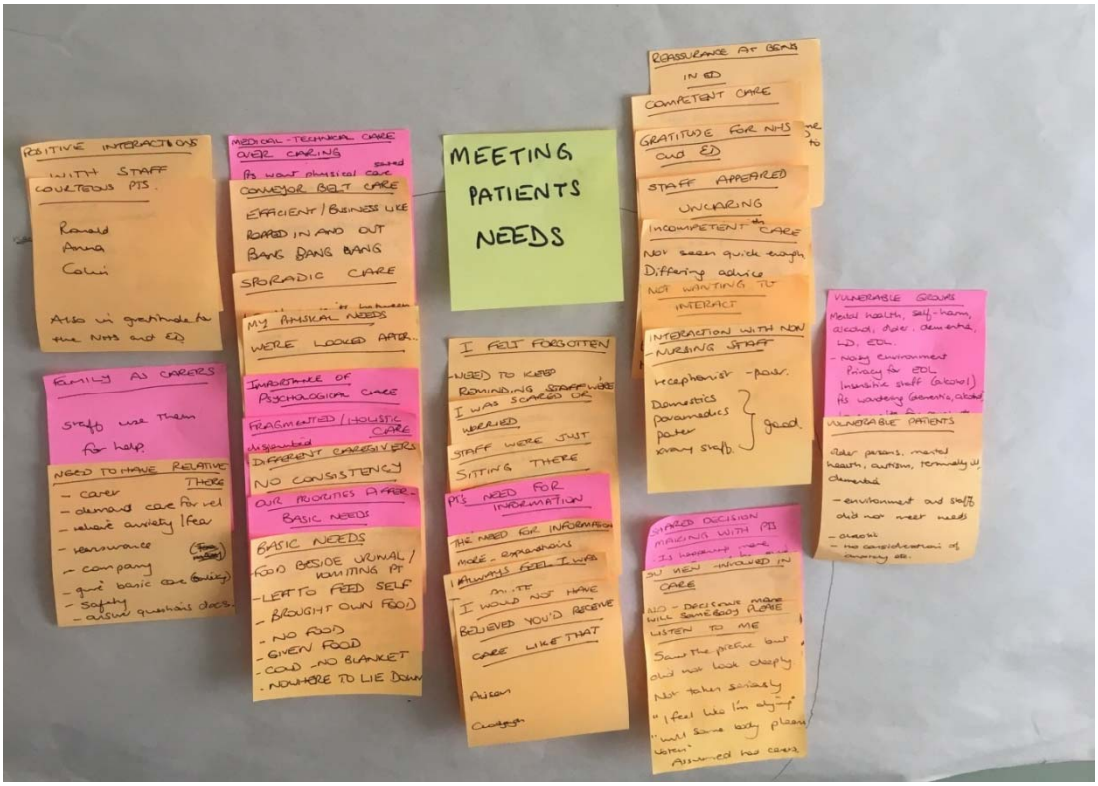
Theming in progress

Themes finalised





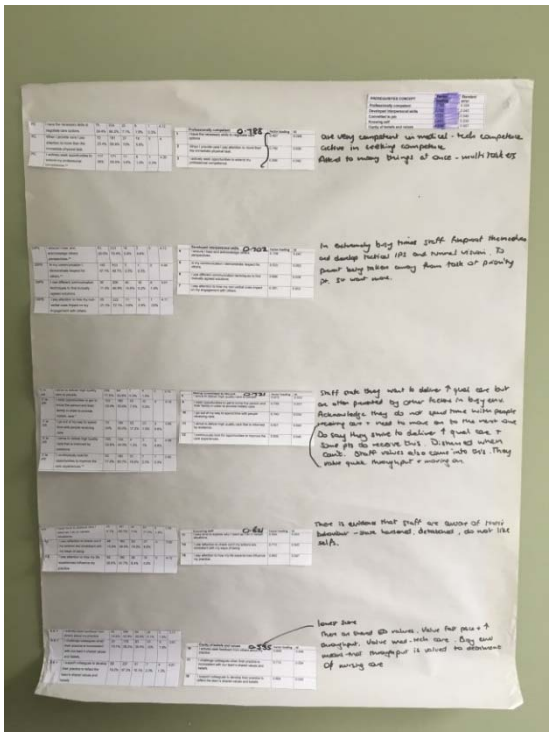

MANAGING A CHAOTIC ENVIRONMENT
PHYSICAL ENVIRONMENT
No towels, shower/toilet. Cramped, juggling space, eating exposed, dignity, PRIVACY
PRIVACY + DIGNITY
ANYBODY COULD WALK IN.
CLEANLINESS
UNCOMFORTABLE / UNTIDY ENVIRONMENT
PARAMEDICS WERE QUEUED UP
JUGGLING SPACE
JUGGLING SPACE
IMPACT OF CARE ENV.
Missing / merger compromises safety / info/ skill set / are cancelling/giving Cat switches to urgent mode and basic care compromised.
STAFF ARE TO BUSY TO BE DISTURBED
- Pts notice staff busy + comment
SENSING A BUSY ENVIRONMENT
- everyone doing something
IT WAS LIKE PICADILLY CIRCUS
People's Market WW1 Bomb Zone
CONSTANT CRISIS MGT
under the cosh
Triage point / survival mode
Cat 5 today
- wanting to do everything to the least possible
- running from cubicle to cubicle.
(Every body got a wee bit of something)
STAFF RELATIONS IN ED
Good except when stressed
Good teamwork
Mask outside
Some days resent being organised by nurses
So busy not do not help each other out the
AT RESPONSE TO WARD
STAFF ATTITUDE
Feel nuisance
Apologetic
embarrassed
Shocked
Speed up for ED staff
HANDOVER TO WARD
STAFF - STAFF RELATIONS
Seemed good.
STAFF RELATIONS OUTSIDE ED
'them and us'
- destructive when moving
NEED TO MANAGE the DEPARTMENT STAFF
locum dis / agency nurses
NURSE ROLE
MOVE PTS ON.
(Shona
Alison
Tom + Jean -)
nurses not leaving but no dr to be seen
AGGRESSION AND VIOLENCE
VIOLENCE AND AGGRESSION
- DRUNK AND STILL DRINKING IN ED
DRUGS AND ALCOHOL
TREATMENT AREA CORRIDOR
POLICE PRESENCE
EXPOSURE TO OTHER PU
DRINKS + DRINKING, VOMIT, URINE, BLOOD SMELLS.
POLICE
PRESSURE TO TALK
TOO MANY VISITORS
INVASION PERSONAL SPACE
ALZHEIMERS PT
BAR FOR INJURY, arm
VULNERABLE, PETRIFIED
STRESSFUL ENVIRONMENT
- Staffing - sick leave / annual / unannounced staff / bounce
GOOD PLACE TO WORK BUT. . . .
STAFFS' BASIC NEEDS
IMPACT ON PERSONAL + HOME LIFE
ATTRITION
IT HARDENS YOU
ONE OF THOSE DREADFUL DAYS
WHEN YOU'RE
ASHAMED
embarrassed + ashamed (2)

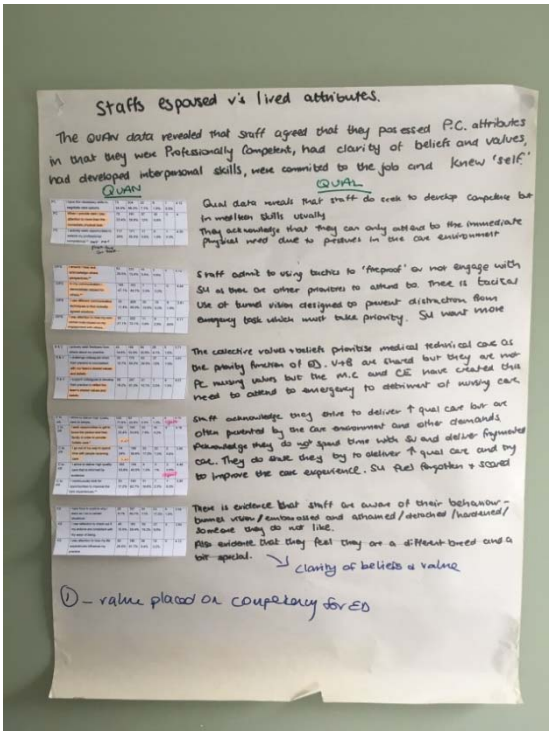

MEETING PATIENTS NEEDS
POSITIVE INTERACTIONS WITH STAFF
COURTEOUS PTS.
Ronald
Anna
Colin
Also in gratitude to the NHS and ED
FAMILY AS CARERS
staffs use them for help
NEED TO HAVE RELATIVE THERE
- carer
- demand care for rel
- relieve anxiety / fear
- reassurance
- company
- give basic care
- safety
- answer questions docs
MEDICAL - TECHNICAL CARE OVER CARING
Pts want physical care
CONVEYOR BELT CARE
EFFICIENT / BUSINESS LIKE
BOARD IN AND OUT
BANG BANG BANG
SPORADIC CARE
MY PHYSICAL NEEDS WERE LOOKED AFTER
IMPORTANCE OF PSYCHOLOGICAL CARE
FRAGMENTED / HOLISTIC CARE
DIFFERENT CAREGIVERS
NO CONSISTENCY
OUR ROUTINES DIFFER
BASIC NEEDS
BASIC NEEDS
FOOD BESIDE URINAL / VOMITING PT
- LEFT TO FEED SELF
- BROUGHT OWN FOOD
- NO FOOD
- GIVEN FOOD
- COLD - NO BLANKET
- NOWHERE TO LIE DOWN
I FELT FORGOTTEN
NEED TO KEEP REMINDING STAFF I WAS SCARED OR I WAS WORRIED
STAFF WERE JUST SITTING THERE
PT'S NEED FOR INFORMATION
THE NEED FOR INFORMATION
MORE - EXPLANATIONS
I ALWAYS FEEL I WAS
I WOULD NOT HAVE BELIEVED YOU'D RECEIVE CARE LIKE THAT
Alison
REASSURANCE AT BEING IN ED
COMPETENT CARE
GRATITUDE FOR NHS OUT ED
STAFF APPEARED UNCARING
INCOMPETENT CARE
Not seen quick enough
Differing advice
NOT WANTING TO INTERACT
INTERACTION WITH NON - NURSING STAFF
Receptionist - poor.
Domestics
paramedics
porter
x-ray staff
good.
SHARED DECISION MAKING WITH PTS
DO WHEN INVOLVED IN CARE
NO - DECISIONS MADE WITH SOMEBODY ELSE
LISTEN TO ME
Seem the priority but did not look unwell
Not taken seriously
"I feel like I'm dying"
"will some body please listen"
Assumed how carers
VULNERABLE GROUPS
Mental health, self-harm, alcohol, drugs, dementia, L.D. etc.
- noisy environment
Privacy for ETOL
Intensive staff (alcohol)
Pts wandering (dements, alcohol)
VULNERABLE PATIENTS
Older persons, mental health, overdose, terminally ill dementia
- environment and staffs did not meet needs
- dement
- no consideration of dementia etc.

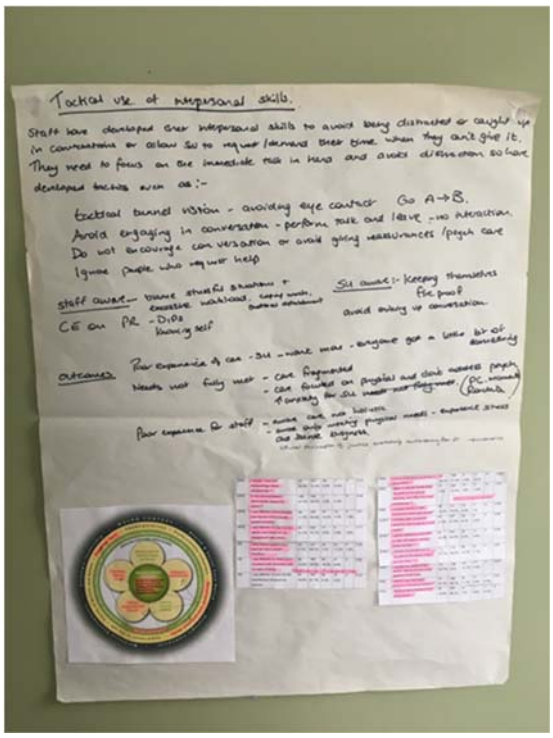
Appendix 17

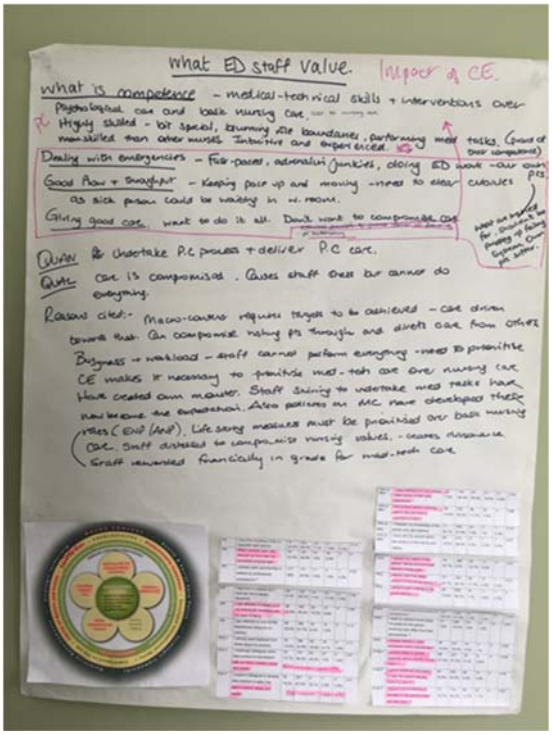
Integration of two stages using the triangulation protocol (O'Cathain et al. 2010a)

The Prerequisites domain

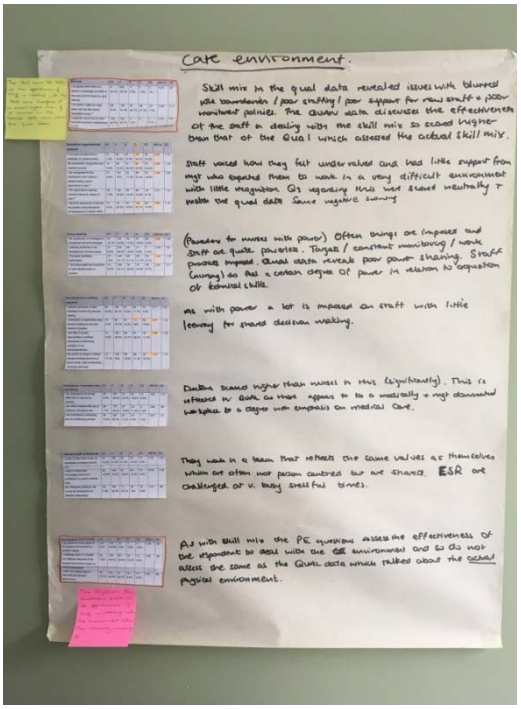


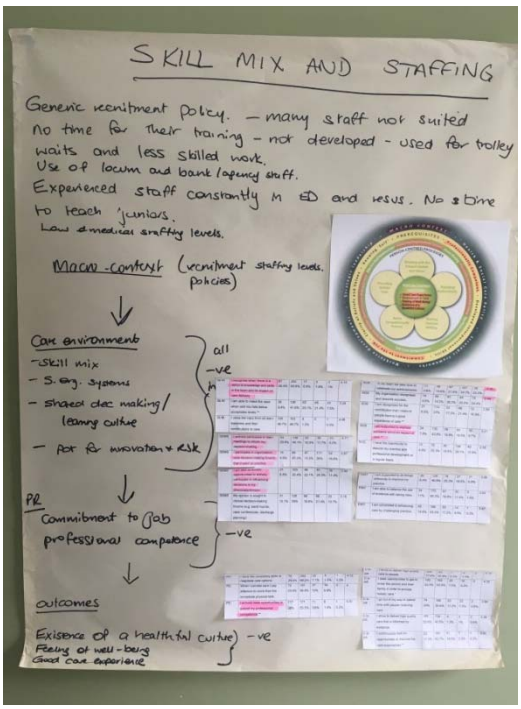


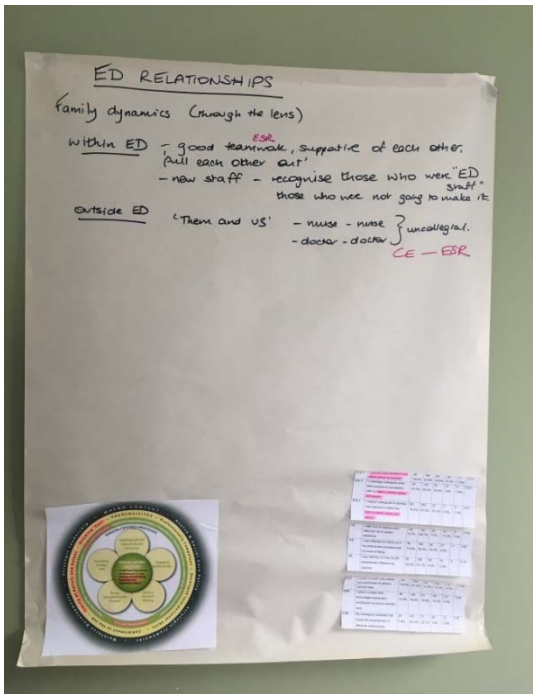


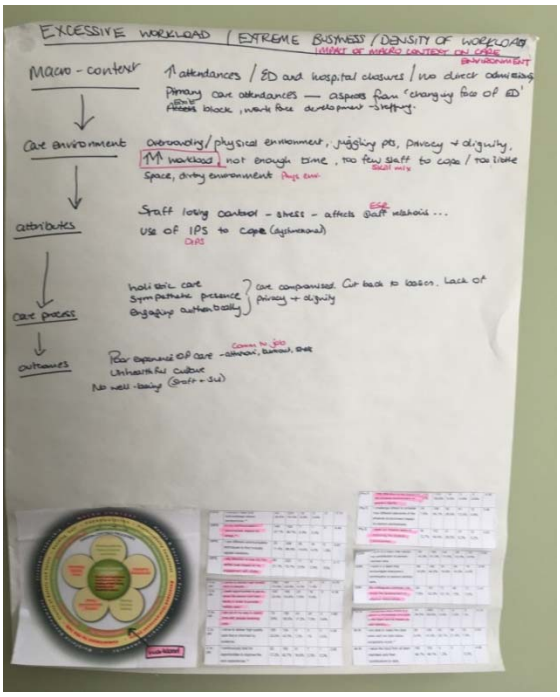


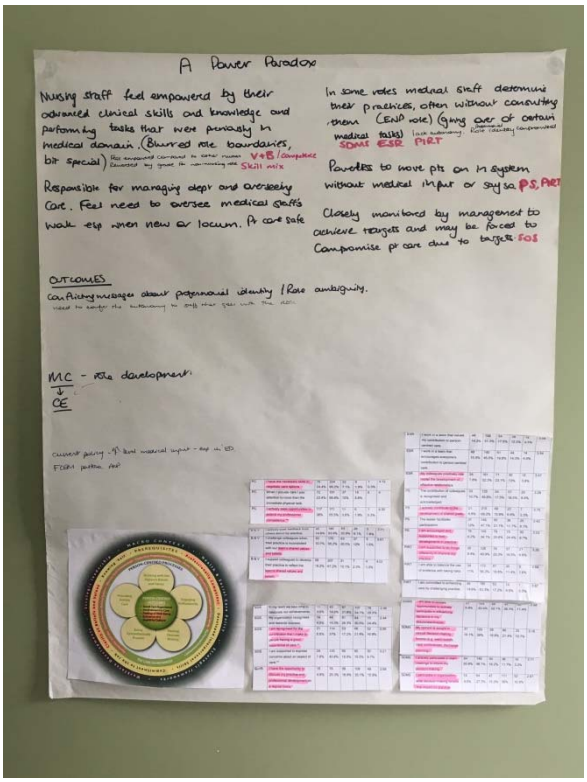
The Care Environment domain



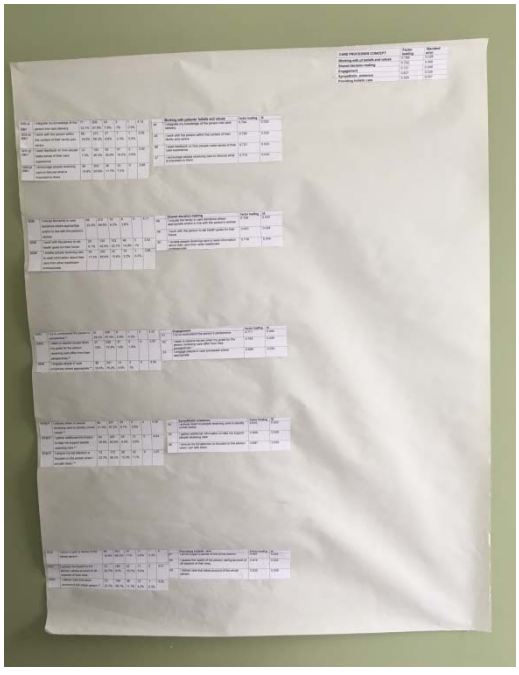


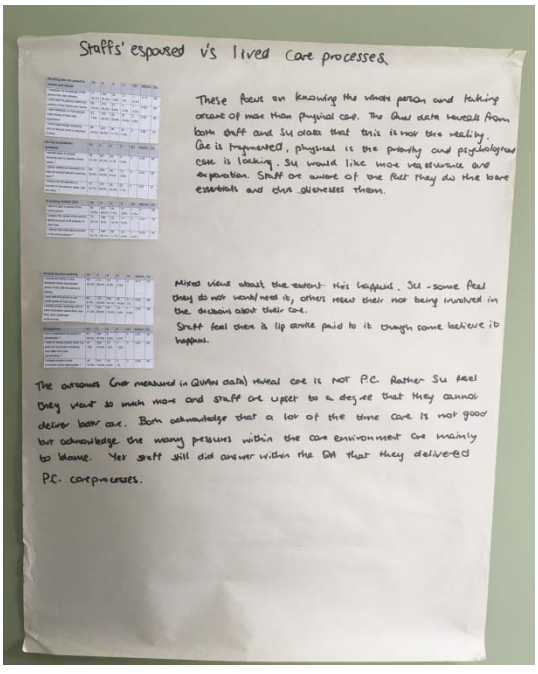




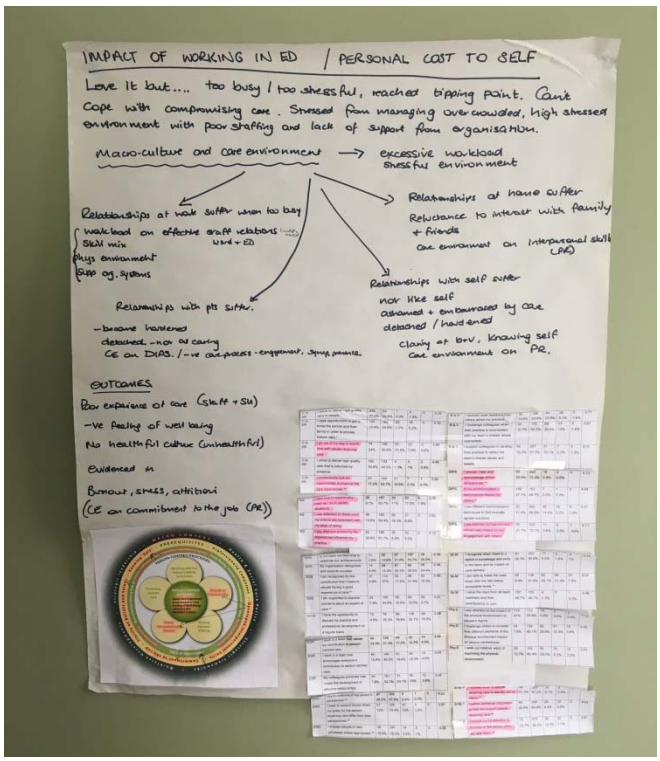


The care processes domain





Outcomes


IMPACT OF WORKING IN ED / PERSONAL COST TO SELF
Love it but.... too busy / too stressful, reached tipping point. Can't
Cope with compromising care. Stressed from managing overwhelmed, high stressed
environment with poor staffing and lack of support from organisation.
Macro-culture and care environment → excessive workload
stressful environment
Relationships at work suffer when too busy
workload on effective staff relations
Skill mix
Phys environment
Supp org. Systems
Relationships at home suffer
Reluctance to interact with family
+ friends
Care environment on interpersonal skills
(PR)
Relationships with pts suffer.
-become hardened
detached. -not as caring
CE on DPAS. / -ve care process - engagement, sympt presence.
Relationships with self suffer
Not like self
ashamed + embarrassed by care
detached / hardened
Clarity of RV, knowing self
Care environment on PR.
OUTCOMES
Poor experience of care (staff + SU)
-ve feeling of well being
No healthful culture (unhealthful)
Evidenced in
Burnout, stress, attrition
(CE on commitment to the job (PR))